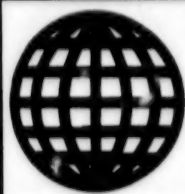


JPRS-TAC-95-001  
14 February 1995



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# ***JPRS Report***

# **Arms Control & Proliferation Issues**

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# Arms Control & Proliferation

JPRS-TAC-95-001

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## SOUTH AFRICA

### IAEA Official: Nation's Nuclear Weapons Program No Surprise

MB2601052995 Johannesburg SAPA in English  
2310 GMT 25 Jan 95

[FBIS Transcribed Text] Pretoria Jan 25 SAPA—A 1993 announcement by former state President F W de Klerk that South Africa had abandoned a nuclear weapons programme was not a surprise to the International Atomic Energy Agency, IAEA Director Dirk Schrieffer said at a nuclear information conference at Midrand, Gauteng on Wednesday. The conference is co-sponsored by South Africa and the IAEA.

Mr Schrieffer said the IAEA had in 1992 noticed discrepancies in figures for enriched and non-enriched uranium stated by South African enrichment plants. "At the time the IAEA Secretariat recognised that the large inventory of highly enriched uranium could mean that a significant portion had either been recovered from an abandoned nuclear weapons programme or, less likely, had been accumulated for a planned weapons programme that was abandoned before its implementation," Mr Schrieffer said.

On the day of Mr De Klerk's announcement IAEA inspectors had been visiting the Atomic Energy Board's nuclear plant at Pelindaba near Pretoria to clarify the "apparent discrepancies". The figures that aroused the IAEA's interest had been contained in a report by the Atomic Energy Board submitted to the IAEA in 1992 in terms of the treaty on non-proliferation of nuclear weapons.

Mr De Klerk announced in March 1993 that South Africa had terminated the manufacture of gun-type nuclear devices in November 1989. On the day after his declaration IAEA inspectors had made preliminary visits to a number of facilities involved in the abandoned project, Mr Schrieffer said. Follow-up inspections continued for five months. Mr Schrieffer said the IAEA had concluded there was no indication components of the programme remained which had not been "rendered unusable or converted to commercial non-nuclear or peaceful nuclear usage".

### Secret Sale of Uranium to Soviet Union Once Planned

MB2901183195 Johannesburg SUNDAY TIMES  
in English 29 Jan 95 p 26

[Report by Marlene Burger]

[FBIS Transcribed Text] For nearly a decade, a planned uranium deal with the former Soviet Union was one of South Africa's most closely guarded secrets. Had it come to light at the time—at the height of the United Nations arms embargo and during the Cold War—the R27.7-million [rands] deal for 520 tons of uranium oxide would

have sent shock waves around the world. But the deal, involving enough uranium oxide to fuel an average nuclear power station for three years, was aborted when the Atomic Energy Commission became suspicious about the identity of the end buyer.

Details of the deal with a Moscow-based company, Tachnabsexport, emerged during a two-year court battle when Orda AG, the Swiss sanctions-buster which organised the deal in 1985, sued the Nuclear Fuels Corporation of SA [South Africa] (Nufcor) for non-delivery of the uranium oxide.

Nufcor faces a R12-million bill after the Rand Supreme Court ordered it to pay R7-million plus interest and legal costs to the Zurich-based company which specialises in clandestine trade.

Nufcor—formed by uranium mining companies to process uranium oxide and market it in Europe, the U.S. and Far East—is appealing against the court order.

The transaction was so sensitive that throughout the trial Orda executive vice-president Dr J Hugelshofer referred to Tachnabsexport as "the third party."

Dr Hugelshofer, described by Mr Justice W Schutz as "the epitome of the international middle man", told the court he had been involved for several years in sanctions-busting for South Africa and trading with Armscor.

The planned transaction was marked by an extraordinary level of secrecy to ensure "a clean deal".

"The Russians knew they would be buying South African uranium, the South Africans knew they were selling to Russia, but it was of the essence that both parties should be put in a position that they could deny there had been any deal between them," the judge observed.

The commission wanted a written guarantee that the uranium oxide would be used exclusively within the Soviet Union for peaceful, non-explosive purposes. Unable to obtain such an undertaking from Tachnabsexport, Dr Hugelshofer offered a surrogate warranty, stating that he had obtained the guarantee from his client.

Believing this document would satisfy the commission, Nufcor finalised and signed the contract with Orda and chartered a ship to transport the uranium from Durban to Aden where it was to be transferred to a Soviet vessel.

But a few weeks later, the commission told Nufcor no export permit would be granted unless it received a written undertaking "by the appropriate Soviet authority" confirming the destination and peaceful use of the uranium.

The court heard that then-Minister of Mineral and Energy Affairs F W de Klerk, who had approved the deal, and commission chairman Wynand de Villiers had become suspicious and feared the uranium could end up in a pariah state.

Ironically, the deal came just four years after South Africa had been obliged to buy enriched uranium worth \$250-million from France to save the Koeberg nuclear power project from disaster.

While the court found that the Soviet Union was the most probable planned buyer of Nufcor's uranium in 1985, it was unable to say why the Russians, with a known stockpile of 210,000 tons, would have needed to buy the shipment.

Boris Pushkin, 80, erstwhile director-general of Tachnabsexport, testified that between 1980 and 1985, neither the company nor the Soviet Union had purchased "a gram" of uranium from the West and said he knew nothing of the planned uranium deal.

#### **Rightwing Reportedly Acquires 10 Nuclear Devices**

*MB0302113295 Johannesburg WEEKLY MAIL & GUARDIAN in English 3-9 Feb 95 p 9*

[Report by Jan Taljaard]

[FBIS Transcribed Text] The rightwing has allegedly acquired up to 10 nuclear devices that had somehow escaped the attention of the International Atomic Energy Agency (IAEA).

Allegations that 16 instead of six nuclear devices were made during South Africa's nuclear weapons programme

were last week levelled against the Atomic Energy Corporation's [AEC] chief executive Dr Waldo Stumpf. It was also alleged that hundreds of nuclear shells were hidden away together with the untraceable surplus bombs. These are now said to be in the hands of rightwing groups.

The people behind the allegations are reportedly British TV journalists, Peter Hounam and Gwynne Roberts.

Concerning the allegations of rightwing complicity, WM&G [WEEKLY MAIL & GUARDIAN] knows of at least two prominent rightwingers who were involved in the bomb project. To equate their past involvement with the current allegations would be stretching the circumstantial. [sentence as published]

Dr Wally Grant, a former chief of the nuclear facility at the time of the bomb manufacturing, is at present a member of the Volkstaat [Afrikaner homeland] Council.

Jan S Smith, former chief of the white supremacist Church of the Creator in South Africa, also admitted to having worked "on the fringes of the initial stages" of the project.

A spokesman for the AEC said the IAEA had declared they were satisfied the inventory on the AEC's books corresponded with the production capacity and operation history of the bomb plant at Pelindaba.

**Japan's Kono Says China To Stop Nuclear Tests  
in '96**

*OW3101115195 Tokyo MAINICHI SHIMBUN  
in Japanese 31 Jan 95 Morning Edition p 2*

[FBIS Translated Text] With regard to the fact that China has repeatedly conducted nuclear tests, Yohei Kono, deputy prime minister and foreign minister, revealed that China has informed the Japanese

Government of its intention to "stop conducting (nuclear tests) in 1996." His remarks were made at a 30 January session of the House of Representatives Budget Committee. Japan and the United States aim to conclude the Comprehensive Test Ban Treaty (CTBT) by 1996. Although China also has shown its intention to sign the treaty, Beijing seems to plan to continue conducting nuclear tests until it concludes the treaty.

**JAPAN****Tokyo To Clear Up Chemical Weapons Left in China**

*OW2501132895 Tokyo KYODO in English  
1004 GMT 25 Jan 95*

[FBIS Transcribed Text] Tokyo, Jan. 25 KYODO—Japan plans to clear up chemical weapons left in China after World War II in a move to be required by the planned ratification of an international treaty banning such weapons, government officials said Wednesday [25 January].

They said Prime Minister Tomiichi Murayama will tell Chinese leaders of the decision when he visits Beijing possibly in late March.

The government will send a team of officials mainly from the Foreign Ministry and the Defense Agency to China in early February to look into the situation, they said.

The government aims to win parliamentary approval in the current session of the Diet to ratify the international treaty that stipulates that each country must safely dispose of such weapons used abroad since 1925.

China has said there are some 2 million toxic gas bombs left in the country by the Japanese Imperial Army during the 1937-1945 Sino-Japanese war.

Japan has held three rounds of working-level bilateral talks and sent a fact-finding mission twice so far to find chemical weapons left by the Japanese.

The bombs are mainly of mustard gas, such as was used in the 1980-1988 Iran-Iraq war.

Some 2,000 Chinese people have reportedly suffered skin injuries due to a leak from one such gas bomb.

Japan is studying how to clear up such chemical weapons in collaboration with academics and chemical companies and plans to send officials to the United States and some other countries rich in chemical weapon-processing technologies to get the necessary know-how, the officials said.

The treaty banning chemical weapons was signed by 130 nations in January 1993 and is to take effect 180 days after 65 nations ratify it. So far Germany and 19 other nations have ratified the pact.

## CZECH REPUBLIC

### **Alleged Heroin Dealer Linked to FRG Uranium 235 Delivery**

AU0902173395 Prague RUDE PRAVO in Czech  
8 Feb 95 p 1

["(fr)"-attributed report: "A Czech Suspected of Drug Dealing Allegedly Smuggled Uranium Too"]

[FBIS Translated Text] Prague—A 43-year-old Czech has been accused of the unauthorized production and possession of drugs, counterfeiting money, and the unauthorized possession of radioactive material. He was arrested along with a 23-year-old Tunisian as the middleman in a deal involving 1.0 kilogram of very high quality heroin.

According to Major Vaclav Cech from the City of Prague Office of Investigations 2d Division, this heroin is officially valued at 1.8 million korunas; however, it would fetch much more on the streets. The heroin was most likely destined for the Czech market.

A user—who managed to escape, however—paid for part of the consignment with forged dollars and Swiss francs. According to the investigator, the Czech middleman is, moreover, suspected of handing over 87.8-percent enriched uranium 235 to a German receiver in Germany. This involved a sample of a material that is suitable for manufacturing an atomic bomb and of which several kilograms were supposed to have been delivered.

The Tunisian and the Czech middleman, who are both in custody, face a prison sentence of up to 15 years. At the moment, nothing more is known about the origin of the heroin or the uranium.

**ARGENTINA****Congress Ratifies Nuclear Nonproliferation Treaty**

PY2401103495 Buenos Aires TELAM in Spanish  
1957 GMT 21 Jan 95

[FBIS Translated Text] It has been officially reported that the executive branch has promulgated Law 24448, through which Argentina ratifies the Nuclear Nonproliferation Treaty [NPT].

The official gazette notes that Bill 24448 was approved by the national Congress on 23 December 1994.

Implementation of the NPT began in 1968. It represents an effort on the part of the international community "to stop the nuclear weapons' race" and to encourage the implementation of effective measures aimed at achieving nuclear disarmament.

A state possessing nuclear weapons, upon becoming a signatory of the NPT, is committed "not to transfer nuclear arms or devices to any state" and "not to purchase or manufacture" nuclear weapons.

NPT signatory countries implement a safeguard system that is coordinated by the International Atomic Energy Agency (IAEA).

"Nothing mentioned in the treaty will be interpreted as affecting the inalienable right of each party to work on research, production, and use of nuclear energy for peaceful purposes," Article Four states.

The law points out that each party "has the right to participate in the broadest possible exchange of scientific information aimed at furthering the use of nuclear energy for peaceful purposes."

**BRAZIL****Plans To Join Missile Control Regime Conveyed to U.S. Envoy**

PY0802024095 Rio de Janeiro JORNAL DO BRASIL  
in Portuguese 7 Feb 95 p 4

[Article by Leandro Fortes]

[FBIS Translated Text] Ambassador Ronaldo Sardemberg, head of the Strategic Affairs Secretariat, formally conveyed to U.S. Ambassador Melvin Levitsky his plans to have Brazil join the Missile Technology Control Regime [MTCR], thus allowing the country to produce and export long-range missile equipment and technology. Some even interpreted the meeting between Sardemberg and Levitsky as one stage in the negotiations seeking to end hostilities between Peru and Ecuador.

A U.S. Embassy official explained that Sardemberg had met with Levitsky to ensure U.S. support for the Brazilian plans to join the MTCR, which joins together 20 countries that control the trade in missiles more powerful than the standard 500 kilos cargo/time transported at a speed of 300 km per hour.

The embassy official explained that any transaction in this area without MTCR intermediation is deemed an act of "hostility." According to him, the idea is to prevent countries linked to international terrorism to use the missile-producing parallel markets.

Since the beginning of 1994 Itamaraty has begun to publicly declare that Brazil was interested in joining the MTCR. One of the last acts of the Itamar Franco administration last December was to publish norms for the control of materiel exports, already looking forward to its participation in the long-range missile market.



## REGIONAL AFFAIRS

### Iran, Iraq Said Crossing Nuclear Threshold

95W/P0037Z Paris AL-MUHARRIR in Arabic  
5 Dec 94 p 11

[FBIS Translated Text] London. Middle Eastern countries are getting much closer than expected to crossing the nuclear threshold, which has so far been monopolized by the five UN Security Council states—the United States, Russia, China, Britain, France. Other states in the Third World are moving rapidly toward acquiring weapons of mass destruction. India and Pakistan, for example, already have such weapons.

An implicit and unplanned "gentleman's agreement" apparently exists among the Islamic states to contain the Israeli nuclear giant. Israel exists in a region in which it has no origin and has been gradually advancing in that area at the expense of other states and peoples. It has been supported by the biggest Western nuclear giant, which, in the absence of the "Soviet giant," has undermined the Eastern influence. The "Soviet giant," has become a Russian giant whose nuclear teeth still cause fear and should be taken into serious consideration.

Several quarters in Moscow, Kiev, and the capitals of Eastern Europe and the non-Arabic speaking Islamic republics think that the authorities in these states are energetically supporting the creation of a new nuclear deterrent to take their place, separate between them and the West, and constitute their first line of defense. This would be similar to the Western first line of defense, represented by Britain and France, to defend the interests of the United States. This line of defense, rather than the United States, would suffer the first blow in any future nuclear war. The Eastern countries think that their disintegration, which politically and demographically led to the disintegration of the Soviet Union, must not stand in the way of their military unification and winning over the Third World, which is currently lost in the labyrinth of Western policies, particularly U.S. policies. They think that their undeclared new alliance would have the same effect as the European wall built by Washington in the face of the East and its development since World War II. In view of what is being proved daily by the actions of the United States—the current sole superpower in the world—and the way the United States imposes its will on the weaker states with arrogance and unilateral decisions and dominates the United Nations, these quarters think that the long history of events demands a return to the two axes policy that existed before the Berlin Wall was demolished. They think this should be done before matters get worse and eventually reach the point of explosion between Russia and its allies, on the one hand, and the United States, on the other.

Signs of discord have begun to appear between Washington and Moscow on many hot international issues, such as the future of NATO, the future of the Eastern

independent states, the Chinese issue, the future of Cuba, Iraq, Libya, the Middle Eastern issue, the Bosnian war, and the future of Asia and Africa. Consequently, the future does not look good. The Americans have violated their commitments and agreements with the countries of the former Soviet Union regarding the continued Russian leadership of these countries. They did this through covert penetration, direct military threats, extensive intelligence penetration, and technological commercial and economic invasion.

The Eastern European countries think that the West should compensate them for abandoning communism and adopting democracy and the free system. They should not be considered as having fallen into the American lap. The issues of freedom and democracy are not a Western invention nor a new American commodity. The communist revolution in 1917 was the pioneer of freedom and democracy against totalitarian monarchy and the system of repression and feudalism. Communism later deviated from its original goals and became the sword that chopped the head of freedom, which the West carried and made into an empty statue for false worship. The Eastern European peoples, however, were not "communist." They submitted unwillingly to a caravan of dictators, and they were the ones who subsequently created "perestroika" to get rid of these dictators and destroy their oppressive constitutions.

Secret Western studies confirm that Moscow has begun reviewing its profit and loss calculations on all the internal, European, and international levels. The world will witness a return to a new "cold war," with peaceful controls and military fangs, designed to restore the international balance and put the arrogant American genie back into the bottle of reason and logic before it is too late. This identifies the reasons for the current balance between Boris Yeltsin's submission to the West and the military wing's rebellion against his political decisions and the establishment of "self-rule" by the Russian generals and the "communist columns" in Ukraine, Belarus, Georgia, Kazakhstan, and other small Baltic states. Four years after the "great fall," the indications are that the Russian generals and communists have so far not abided by the instructions of their political leadership, which depends on the West to carry out its economic development plans.

Russian foreign ministry sources affirm that Yeltsin's administration has reviewed its foreign policy in the first three months of this year to restore unity at home, which the world thought no longer existed. This is being done after the Russian president has suffered the same "internal symptoms" his American counterpart Bill Clinton suffered regarding the failure of his internal economic and agricultural policy and the loans' policy, which prompted him eventually to look outside to recharge his administration. Yeltsin's administration is facing a different challenge, which will perhaps show his ability to defend the former communist regimes, despite all the

sins and mistakes they have committed internally. Furthermore, Yeltsin has realized—perhaps before it is too late—that “whoever takes off his military uniform becomes naked.” So he also reviewed his hesitant position toward his military commanders. He sought their forgiveness after he had disregarded them for a long time. He asked for their blessing for the military changes he made last month at the Defense Ministry whose “happy ending” could be the removal of Defense Minister Grachev.

With the Russian military regaining the initiative, the distorted picture of former Arab, Asian, and African allies is currently being polished. They have gained a new breathing space after they were about to be suffocated in the turbid American swamp. Since Russian forces, for the first time since the disintegration of the Soviet Union, landed in the Serbian part of Bosnia at the beginning of this year, the former Soviet allies have realized that the “sons” of Brezhnev and Andropov are still alive and the communist fetus in the womb of the present Russian administration is still kicking. They have also realized that the considerable flow of modern weapons and radioactive material to them through international channels—which the CIA with all its might could not block—are strong and “inevitable” indications that “the Russians are coming” and that “the world has not ended yet.”

Citing Russian military sources and experts, including a general in a government weapon exports organization, press reports last week said that some states in the Middle East, including Iran and Iraq, are continuously receiving different types of weapons from an “uncontrolled Russian market.” These weapons include the most advanced technology in guidance systems for anti-missile missiles. The United States showed during the Gulf War that it has the sole advantage in the missile field. An urgent need became apparent on the opposite side, particularly in Iraq, for an air deterrent, and Moscow has compensated it for this deficiency in the past two years. What is more dangerous is that the Russian military and some Eastern countries have adopted the principle of opening their nuclear arsenal for the countries of the Third World to take as much as they can from it. This is because they want to establish a “new world military order” that includes the “vanquished” countries to serve as a counterbalance to the “new world (political) order” led by the United States to check its deviation and madness that have strongly been evident since the beginning of the nineties.

The Americans have been trying desperately to prevent nuclear and missile technology and giant guns from reaching Iraq, Iran, Korea, or even the mafia, the revolutionary organizations, and “extremist movements.” However, they realize that they are just trying to obstruct and delay what is, nuclear-wise, inevitable in the coming

10 years. Based on this premise, a “rational” theory exists in the United States, calling for reshuffling the foreign policy cards and distributing them according to the new nuclear game. Advocates of this theory condemn the Clinton-Christopher-Bush policy that calls for “containing Iraq and Iran” and other states that will soon appear on the nuclear map. They call for a return to reason to deal beginning now with these states on the basis of the importance they will assume at the beginning of the 21st century.

However, it appears that there is little hope that Clinton, the “chance president,” will absorb such changes. He has proved, despite his young age, that he is the most reactionary in his thinking, the most closed in his horizons, and the most limited in his vision in modern American presidential history. It seems there might not be any hope for any miracle of this sort during his term, which apparently will be short.

## EGYPT

### Paper Urges Third World Effort Against Nuclear Violations

NC2601075095 Cairo MENA in Arabic  
0605 GMT 26 Jan 95

[FBIS Translated Text] Cairo, 26 Jan (MENA)—AL-AKHBAR says Israel should not expect the issue of signing the Nuclear Nonproliferation Treaty to pass easily this time, whether at the UN General Assembly or at the International Atomic Energy Agency.

In its editorial today the paper says that the issue of the Treaty, which was signed in March 1970, needs to be reconsidered, especially by small states that do not possess such weapons of mass destruction, so that they can feel safe and secure amid flagrant violations of the Treaty.

The paper calls on Third World countries to take a serious and firm position on Treaty violations by some states, especially after Israel's public announcement that it will not sign the Treaty, while expecting the Arab countries to sign it.

The paper notes that some countries, which are not superpowers, possess nuclear weapons obtained through secret or public assistance, as Israel has done for years. These countries intentionally leaked the news that they possess internationally banned nuclear weapons for their own objectives.

AL-AKHBAR also notes reports about Iran's persistent endeavors toward a nuclear arsenal to serve as an instrument of threat against the Arab countries in general and the Gulf states in particular. It also notes revelations of North Korea's attempt to manufacture nuclear weapons.



**Musa Comments in Davos on Proliferation, Peace Process**

JN0102185595 Abu Dhabi AL-ITTIHAD in Arabic  
30 Jan 95 pp 1, 26

[Report by Haytham Shalabi in Davos]

[FBIS Translated Text] During his presence in Davos to participate in the 25th annual meeting of the International Economic Forum, Egyptian Foreign Minister 'Amr Musa spoke to AL-ITTIHAD about the issues of our Arab region.

He began by hailing the calls for closing Arab ranks by His Highness Shaykh Zayid Bin-Sultan Al Nuhayyan, president of the United Arab Emirates [UAE]. These are supported by statements from other UAE officials, the last of which was by General Shaykh Muhammad Bin-Rashid Al Maktum, crown prince of Dubai and UAE defense minister. He said these are good calls that should be implemented, stressing that Arab reconciliation should be realized.

Musa said there is an effort to realize this reconciliation through the Damascus Declaration, whose member states will meet next week to discuss this point in particular. He said: I hope we succeed in realizing reconciliation, but I am not sure, although I am hopeful.

On the latest developments in the situation concerning the signing of the Nuclear Nonproliferation Treaty, Musa said: The Egyptian position is firm. Contacts with the Israelis and the Americans are going on before the convening of the conference on this treaty in April. The Egyptian position is known and clear. It says we will not accept a single nuclear state remaining in the region. Israel should join the treaty and should subject its nuclear installations to international inspection. This may take time, but it should be started.

He added: It is impossible to accept that only Arab countries should be subject to the international order concerning nuclear programs, either by pressure or by their desire to be part of that international order.

He summed up the subject by saying: Either all of us should be in this order, or we should all be out of it.

On recent talks with Robert Pelletreau [U.S. assistant secretary of state for Near Eastern and South Asian affairs] and the U.S. understanding of the Egyptian position, Musa said the United States fully understands the Egyptian view because it is related to regional security, adding that Egypt will continue this position.

On the coincidence of this dispute and the U.S. media campaign [against Egypt] and the Israeli report [not further identified], Musa said this subject does not concern him much. He added: The timing may indicate something, but this will not affect Egypt's ability to resist pressure and to confront the campaigns directed against it and its ability to reply to, coexist with, resist, or defeat them.

On the current situation of the peace process, Musa regrettably admitted that there is a clear stalemate on all tracks, and this should be tackled by advancing peace on the basis of the main principle of land for peace.

On the impact of this situation on the economic development of the region, and specifically on the regional development bank, Musa said the subject of the bank is not viewed from either an optimistic or pessimistic point of view, because all agree on the importance of setting up this bank. The talks between concerned regional parties will continue to agree on conditions, the location of the bank, and how it will operate. He said: The expert committee assigned to study this project has not yet reached anything specific. No decision on setting up the bank will be made before October.

Musa commented on how much the world, and the private sector in particular, understands the economic problems of the region in the wake of his meetings with businessmen and governments officials. He said: For them, the picture is clear, not hazy. He added: Their main concern recently has been the situation following the Casablanca summit, and whether things are executed. He said that the concept of most of those he met was that the Casablanca summit was held within the framework of a successful peace process and that only minor things remained before good results were realized. We know this is something that is inaccurate. The peace process is now in a very critical situation, and this will adversely influence all other issues that are based on an established peace.

Musa concluded by expressing hope that the Hala'ib issue [between Egypt and Sudan] is on its way to a solution, stressing the importance of calming tension surrounding the issue and the importance of understanding that the subject is not Hala'ib, but the subject of relations and policies as a whole, this is the crux of the dispute.

**INDIA**

**Commentary Blames U.S. for Proliferation**

BK0702154895 Delhi NAVBHARAT TIMES in Hindi  
6 Feb 95 p 6

[Commentary by Ranjit Kumar: "Pakistan's Bomb: America's Belated Response"]

[FBIS Translated Text] That Pakistan has created a huge store of nuclear bombs is information that has been received from many reliable sources, so much so that the military and political leaders of Pakistan have reiterated it themselves with unconcealed national pride. However, if for the first time, a top official of the U.S. Administration confirms that Pakistan has 15 nuclear weapons, it is a matter of special importance. Last week U.S. National Security Deputy Secretary, Lynn Davis, while giving this information, revealed that the United States is seeking Chinese cooperation to remove Indian and Pakistani security apprehensions and oblige them to sign the Nuclear Nonproliferation Treaty [NPT]. To reduce

tension in the South Asian region, the Council on Foreign Relations of the U.S. Administration has proposed encouraging Chinese participation because China has special security relations with Pakistan and its diplomatic relations with India are also improving. In other words, the United States has indirectly admitted that it is in no position to play any effective role in South Asia.

The United States is well aware of the reasons why India is refusing to sign the nuclear NPT, and why India is prepared to be a coproposer with the United States to enforce the Complete Test Ban Treaty (CTBT). Because the CTBT would be applicable to all countries of the world, after the enforcement of the CTBT no country would be able to produce nuclear material or enriched uranium likely to be used in making nuclear weapons. However, the NPT would give the right to countries with a nuclear capability to keep their weapons, with all other countries being deprived of them. A majority of countries, including India, were against this discriminatory treaty, and this was the sole reason why the intentions of the United States and countries with a nuclear capability did not carry in New York in the conference held between 22 and 27 January to propose the extension of the NPT for an unlimited period. In this 169-member NPT body, the United States needs only a simple majority, but its target fell short by just 25 votes. So to show its commitment to the NPT, the United States agreed to make a sacrifice and be ready to stop carrying out any new nuclear tests until the signing of the CTBT in 1996, and it would not insist on the inclusion of the provision in the CTBT that it reserved the right to leave it any time it, the United States, wanted.

However, China is not likely to dispense with its nuclear weapons until America resolves to do so. And if China does not do so, Russia and India will also not follow suit, because Russia and India have been rivals of China. Moreover, if India and China refuse to drop their nuclear weapons, the newly independent republics of the Middle East will also not agree to destroy their nuclear weapons. And so Pakistan will continue to assert that she will not sign the treaty until India does so. This represents therefore a very valid and effective pretext for Pakistan to tell its old military friend, the United States, that: "You may continue to follow the Pressler Amendment, but we'll continue to make nuclear weapons, especially when India is not signing the NPT." On the other hand, since America's old military ally, Israel, does not agree to sign the NPT, the other countries in West Asia are not likely to sign it either.

What is interesting in this entire context are the statements made by the U.S. Defense Secretary last Wednesday in New York while criticizing the Pressler

Amendment. His utterances reveal the United States' remorse for having enforced the Pressler Amendment. It was due to the Pressler Amendment that America's ordinance factories could not get orders from Pakistan. As a result, the United States lost many job opportunities, while the ordinance factories of Sweden and Britain made good profits at its expense. Owing to the Pressler Amendment, the United States had to take back its eight frigates from Pakistan, which had been given on lease. It suffered a loss because Pakistan then had to buy five frigates from Britain. Besides, what has happened as a result of the United States' refusal to deliver the F-16 bombers to Pakistan? Pakistan is soon going to buy bombers with a similar capability elsewhere, so it appears the American weapons factories are turning green with envy at losing their customer—hence, their continual pressure on the Pentagon, resulting in Mr William Perry's utterances that it is only due to the Pressler Amendment that the arms race is heating up in South Asia. Does he mean to say that had the Pressler Amendment not been there, the arms race would not have intensified and Pakistan would not have made a nuclear bomb? The basis of the Pressler Amendment is to prevent Pakistan from making nuclear weapons. Mr William Perry opines that the United States' hold on Pakistan has decreased substantially after the enforcement of the Pressler Amendment, leading to Pakistan's not accepting any American directive and eventually making an atomic bomb. But the reality is that even if the United States had given F-16 planes to Pakistan, the latter would have still made an atomic bomb and the United States would again have expressed its helplessness, saying that it could not do anything about it. On the other hand, had the United States stopped supplying high tech weapons and their spare parts, Pakistan's entire defense preparations would have been hurt and then the Pakistani leadership would have had to genuflect before the Pentagon authorities in utter submission.

However, Pakistan went on clandestinely producing an atomic bomb and the United States has continued to pretend to overlook its ally's preparations. Under such a situation, India's querying of the relevance of the NPT is quite justified. Now the people of India have begun to see the logic behind India's refusal to sign the NPT. It is high time that other developing countries, as well as European ones, also realized the irrelevance of the NPT. Since Pakistan has officially admitted that it possesses a nuclear device, and U.S.-Pakistan relations continue to prosper, it is natural for Pakistan to believe that the United States is not really worried about Pakistan's making an atomic bomb. As a result, the demand for making nuclear weapons is likely to be more pronounced in India too, leading to a reduction of the credibility of the American drive for the NPT in the process.

**Commentary Sees 'Blackmail' in Pakistani Nuclear Policy**

BK0702142495 Delhi THE HINDUSTAN TIMES  
in English 6 Feb 95 p 13

[Commentary by Savita Pande: "Pakistan: Alternative Route to Nuclear Bomb"]

[FBIS Transcribed Text] Pakistan has threatened to complete and operate a plutonium production reactor under construction in Khusab near Sargodha in northern part of the country, unless India agrees to freeze its fissile material stockpiles at a level equivalent to stocks held by Pakistan, according to a recent issue of Nucleonics Week.

This also settles the doubts raised by many about the ultimate destination of smuggled plutonium from Russia via Germany. This also proves the fallacy of Pakistan's clarification issued at that time that Pakistan had in mid-70's stopped pursuing the plutonium route to bomb. The reactor, when it starts operating, will have a rating of 50 to 70 MW. This will give Pakistan access to unsafeguarded fuel which can be reprocessed to extract plutonium.

The Indian defence experts view this development as a part of Pakistan's strategy to resort to blackmail. According to Air Commodore Jasjit Singh, Director, Institute for Defence Studies and Analyses, "the reported Pakistani threat to complete a plutonium processing reactor, if true, is a blatant attempt at blackmail. Blackmail, first, of the U.S. to accept the nuclear weapon status of Pakistan and secondly, to blackmail India to try and place a limit on India's nuclear capabilities". He also says: "If the U.S. were to accept such a formulation, India would be justified in asking for parity of a nuclear arsenal equal to at least China."

According to Russian intelligence agency, the Khusab reactor is about 50 per cent complete. According to western sources, the prime suspect in the case is a German firm NTG—Neue Technologien GmbH (NTG), Physikalisch-Technische Beratung (PTB) and Gutekunst. The exports may include components for fuel fabrication, a plant for processing tritium and transport and storage containers for uranium hexafluoride. The intelligence report, however, identifies China as the prime source for key reactor equipment, involving the executive network equipment.

The involvement of extensive network for procurement purposes can hardly be surprising, keeping in mind the "Project 706" network Pakistan had put up in pursuing the enrichment route to bomb. Doubts have been expressed at the highest level in this country about the Pakistani ability to maintain such a system (of centrifuges), considering the extent of "smuggling" and "bypassing laws" resorted to for setting up the Kahuta facility. It is possible that having failed to continue to maintain the now exposed Kahuta project, Pakistan has resorted to the alternative route—reprocessing. More appropriately, Pakistan has gone back to its original route.

Having failed in its effort to procure the reprocessing plant from France—the latter of course went back on its commitment—Pakistan had started its clandestine network. What is more important to remember is the fact that there was a time when Pakistan was pursuing both the routes, enrichment as well as reprocessing. Thus the prediction by the scientific elite of the country that Pakistan's nuclear capability is "a big bluff" is difficult to digest. That country's need to have nuclear weapon is so dire that the probability of their embarking on both the routes is more plausible than the "big bluffs" assertion.

The involvement of China may be disturbing but not surprising considering its experience in design and construction of reactors which goes back to early 60s (it built a reactor at Juiguan Ahome Energy Complex), the Sino-Pak nuclear axis alive since the days of Zulfikar Ali Bhutto, also its role in putting up the Chashma nuclear power plant and its supply of M-11 missile to Pakistan. The Chinese supply of reactor components or material without safeguards could of course be a matter of serious concern to those who point out that China is being tamed by the Nuclear Non-Proliferation Treaty.

Having acceded to the treaty, China is under a commitment not to assist any non-nuclear weapon state acquire the capability. Interestingly Pakistan also supports the treaty and had voted in favour of the resolution commending that treaty but had not acceded to it because "India had not". The treaty prohibits non-nuclear weapon states from acquiring such a capability.

Pakistan's threat to finish the reactor following failure of global talks on fissile material cut-off further highlights its attempts to take political mileage out of its nuclear weapons programme as well as policy. Pakistan had told the U.S. that having agreed to halt the production of HEU (Highly Enriched Uranium) Islamabad would seek assurance from India that it will cease production of unsafeguarded plutonium.

Interestingly again, this time, the myth of Pakistan's proposal was exposed by none other than Pakistan's former army chief, General Aslam Beg, himself. He said: "Limiting enrichment of uranium does not cap your nuclear programme. If you are carrying out enrichment of uranium up to 5 per cent, to take it to 20 per cent, perhaps, you need about a week's time. If from 20 per cent you want to take it to 95 per cent another ten days or so will be required. Thus, within 15 days, if you want, you can just raise the level of 95 per cent and you will be producing weapon grade uranium."

Pakistan's insistence on including existing stockpile in the fissile material cut-off agreement in addition to its future production is simply guided by its regional nuclear arms control approach. Simply put, it means making proposals it knows would never be acceptable to India.

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These include a mutual ban on fissile material production. After three years of repeated offers by that country Rajiv Gandhi had rejected the proposal expressing doubts about the fissile material stockpiled in that country. Pakistan's estimated weapons grade enriched uranium is about 200 kg and is as yet not known to produce any significant amount of separated plutonium. Its non-reprocessing capability is limited to a laboratory-scale facility at the Pakistan Institute of Nuclear Science and Technology at Rawalpindi.

The report of course should worry the Americans more than any other country, desperate as they are to seek an unlimited extension of the Nuclear Non-Proliferation Treaty.

Coming close on the heels of the Benazir Bhutto's expressed fears in London Times interview of fundamentalists in Pakistan going "totally proliferationists" if the country is pushed too far and the United States does not change its nuclear policy towards Pakistan, and the Swedish report of an undeclared reactor (the country being an NPT [nuclear nonproliferation treaty] party since 1970), the Americans will have very little option but to bargain and keep the carrot hanging till April 1995 when the future of the NPT is to be decided.

#### **Spokesman Denies Nuclear Concessions Made to U.S.**

BK0602152595 Delhi ISI Diplomatic Information Service in English 1451 GMT 6 Feb 95

["Press Release"—ISI Headline]

[FBIS Transcribed Text] Responding to queries regarding press reports on India's position on the proposal to ban fissile material production, the official spokesman stated that it is totally incorrect that India has agreed under U.S. pressure to negotiations on the CTBT [Comprehensive Test Ban Treaty] and on a convention to ban the production of fissile material for nuclear weapons. These are longstanding Indian proposals, the one on the CTBT having first been made by Pandit Nehru in 1954 and the other as part of a comprehensive proposal on nuclear weapons freeze mooted by India under Prime Minister Indira Gandhi's leadership in 1982. We are gratified that the U.S. and other nuclear weapons powers have at last come around to our point of view on these issues.

These conventions will be important steps towards a nuclear-weapon free world to which India has been committed and for which a framework was presented at the United Nations Third Special Session on Disarmament by Prime Minister Rajiv Gandhi. The security of all nations, including India's, would best be safeguarded by a nuclear-weapon free world.

New Delhi, Date 6 Feb.

#### **Editorial Urges Rao To Stand Ground on NPT Issue**

BK0602155995 Delhi THE HINDUSTAN TIMES in English 6 Feb 95 p 13

[Editorial: "N-Option Unkept?"]

[FBIS Transcribed Text] Prime Minister P.V. Narasimha Rao's reported readiness to sign a treaty banning further production of fissile materials raises the vital question whether India has given up its nuclear option. In an interview to a Hong Kong-based journal, Mr Rao is stated to have justified his position by saying that India has given explicit support for such a treaty because it is not discriminatory like the nuclear non-proliferation treaty (NPT) in that the five nuclear powers will also stop producing fissile materials. If the contents of the interview, as reported in newspapers, are correct the Rao Government owes a clarification to the nation on the issue. This is because there is a national consensus over India retaining its nuclear option, and nothing has happened since 1991 to suggest that the stand has undergone a dilution. The Prime Minister's reported decision is bound to create doubts whether the government has agreed to meet the United States' nonproliferation objectives in South Asia without signing the NPT and thereby sustaining the impression that India has stood its ground. It must be made clear that India's nuclear option is not confined to the NPT. What the West is attempting is to prevent India from acquiring a capability to build up a nuclear arsenal and missile based delivery system that can threaten distant targets. That is why the package of the NPT of 1970 becomes complete with the launching of the Missile Technology Control Regime (MTCR) in 1987 (not to speak of withholding the transfer of "dual-use" technology despite today's irrelevance of communist-targeted COCOM [Coordinating Committee for Multilateral Export Controls]).

In principle, banning further production of fissile materials and a complete ban on nuclear testing are an acceptable proposition for complete disarmament. But there is more to this proposition than meets the eye. If the five nuclear powers decide not to produce more fissile materials, it is because they do not need to. Their existing stockpiles are enough to blow up the planet many times over. India's capability at present is more technological in character; with the fissile materials at its disposal it can at best be a nuclear nuisance. There are some estimates that even after implementation of START II which could be only some time in the 21st century, the U.S. and Russia would still have enough nuclear bombs to destroy the world. The nuclear powers agreement on fissile production is thus irrelevant to India's nuclear option. On the question of complete test ban treaty, the US is insisting on a right to resume nuclear testing 10 years after the treaty comes into being,

and has also offered China facilities for simulated testing on condition that it signs the treaty. The objective clearly is to coerce India and some threshold countries into signing these two treaties without insisting on endorsing the NPT, and achieve the goal of nuclear capping. Once India is a party to these treaties, it would effectively have abandoned its nuclear option.

## IRAN

### IRNA Denies UK Weekly's Report of CW Arsenal

LD0702203695 Tehran IRNA in English  
1931 GMT 7 Feb 95

[FBIS Transcribed Text] Tehran, Feb. 7, IRNA—In line with propaganda campaign against Iran Western mass media renewed their allegations against Iran, claiming that Tehran is to build a chemical arsenal.

The London-based 'SUNDAY TIMES' weekly in its latest issue quoting American intelligence sources accused Iran of construction of chemical arsenal in cooperation with Indian and German companies.

Without presenting any documented evidence the weekly claimed that the Indian and German firms are supplying Iran with the required equipment and raw materials which is used normally in the production of chemical pesticide and fertilizers.

"According to American intelligence sources, German and Indian firms provided Iran equipment and raw materials normally used in pesticide plants that have helped Iran develop the weapons", SUNDAY TIMES said.

Zionist mass media always accuse Iran in their reports without identifying their sources.

Meanwhile both German and Indian officials have officially denied the charges on the sale of raw material to Iran for production of chemical weapons.

The Islamic Republic of Iran is itself one of the victims of chemical and biological weapons and has always expressed its severe opposition to production and use of such weapons of mass destruction and considers it as violation of humanitarian principles.

Despite heavy casualties of Iranian combatants during the Iraqi imposed war on Iran (1980-88) and its physical and psychological consequences which is obvious among those combatants who were exposed to such chemical attacks, Iran never resorted to use chemical and biological weapons against the Iraqi forces. Meanwhile the weekly itself confessed to this reality saying that during the war, Saddam used cyanide shells, mustard gas and nerve agents on the battlefield. The attacks caused thousands of casualties and demoralised Iranian troops.

The weekly also wrote that the founder of the Islamic Republic of Iran, the late Imam Khomeyni "refused to allow its use".

Western mass media affiliated to Zionist regime have repeatedly accused Iran of production and use of chemical weapons during the war years.

They also accuse Iran from time to time of violation of human rights and support for terrorism.

Tel Aviv and its Western allies have recently embarked on a smear campaign to accuse Iran of seeking nuclear weapons.

Such allegations have become routine since China and Russia declared their readiness to help Iran complete Bushehr atomic power plant.

Referring to unidentified sources the international Zionist mass media claimed that Iran will be able to develop nuclear weapons in the near future, but the International Atomic Energy Agency (IAEA) has repeatedly announced that the Iranian nuclear program is pursuing peaceful aims.

Iran is also a member of the Nuclear Non-Proliferation Treaty, and according to the Article-4 of the convention Iran holds its right of using the nuclear energy for non-military purposes.

Iran wants to use the atomic energy in the fields of development and construction of the country such as safeguarding a part of the need of the country to the electricity.

The Russian energy minister denied the accusation against Iran and announced that the cooperation of his country with Iran in the field of the atomic energy was not against the international laws and regulations.

### Britain Criticized Over Nuclear 'Anxiety' Concerning Iran

NC2601140595 Tehran TEHRAN TIMES in English  
24 Jan 95 p 2

[Editorial: "Ends of British Blackmail"]

[FBIS Transcribed Text] Recently, British Foreign Minister, Douglas Hurd, has expressed his anxiety over "Iran's nuclear threat", saying that he is suspicious of Iran's conduct and that in his opinion Iran will soon be able to manufacture nuclear weapons.

The fact that Britain has joined the U.S. and the Zionist regime in accusing Iran, is not so odd, but there is a point here that should be raised.

Firstly, the nuclear capabilities of the Zionist regime was recently exposed by Jane's Intelligence Review. It was revealed that in such places as Ramallah, Kafr Zakariya [as published], Be'er Ya'agov, al-'Bbun [as published], etc. the Zionist regime had established installations that produced nuclear weapons.

Why did the British decide to expose the nuclear weapons industry of the Zionist regime? Why were they

helped in this exposition by an American expert who provided the satellite photos of those installations?

This shows the collusion between the British and the Americans. In order to serve its own interests in the Middle East, Britain is using this information as a leverage. This has alarmed the Zionist regime.

We think that Britain does not favor the improving relations between Iran and major world powers, especially since these powers can play an important role in the Middle East.

The situation of the Islamic Republic of Iran is unique. The role that Iran can play in the region is very important. Indeed London spares no effort to influence the course of relations between Iran and major world powers by raising a hue and cry. The main objective of this tumult, in effect, is to give an ultimatum to Russia that it should review its political conduct.

But nuclear capability in our time is one of the tools of development. Each country in the world will have to decide, sooner or later, about possessing such capability.

The Islamic Republic of Iran, based on Nuclear Non-Proliferation Treaty (NPT), sees it as its right to make use of nuclear energy. This right, granted by NPT, is something that Iran is not ready to give up at any cost.

#### Israeli Report on Nuclear Targeting Priorities

95WP0041A Tel Aviv DAVAR in Hebrew  
13 Jan 95 p 15

[Article by Dan Avidan]

[FBIS Translated Text] In the wake of a flurry of recent reports that Iran is nearing the ability to produce nuclear weapons, we talked with Dr. Efrayim Qam, deputy director of Tel Aviv University's Jaffee Center for Strategic Studies, about the significance and true dimensions of the threat that Iran poses to Israel. Since his days many years ago when he served as a research officer with the rank of lieutenant colonel in IDF intelligence, Dr. Qam has been a student of the Middle East. He is known for his book "Sudden Attack," in which he analyzed the element of strategic surprise.

**Avidan:** What is Iran's real nuclear potential?

**Qam:** Iran's nuclear program began in the Shah's era. He had a megalomaniac program, investing vast sums and resources in developing Iran's nuclear capability, generally for civilian uses. The Shah planned to build 20 reactors in order to shift most of Iran's energy, despite its rich deposits of petroleum and natural gas, to nuclear production. He had just begun his program but never got to complete it. When the Khomeyni regime took power in 1979, all nuclear activity was suspended on the ideological ground that it was satanic; Iran's might lay in its faith rather than in this kind of activity. For some years, therefore, all nuclear activity in Iran came to a halt.

Iran saw during its war with Iraq that Iraq had a strategic advantage partly because it was developing a military nuclear capability. The Iranians then realized that changing the strategic situation required them to invest in creating a military nuclear capability. It appears that since the late 1980's, Iran has decided to pour its resources into developing a military nuclear capability.

**Avidan:** What concrete action have they taken to do that?

**Qam:** It is not entirely clear what is going on in Iran on that score. The Iranians themselves deny that they are engaged in developing a military nuclear capability. That says that their involvement in nuclear development is for domestic needs - apart from two statements made since 1989 by senior Iranian officials, who spoke very generally of Iran's need to acquire a military nuclear capability. Accordingly, everything we know about this is from indirect signs, assessments and information known to western and Israeli intelligence services.

**Avidan:** What are these indirect signs?

**Qam:** First of all, the Iranians are continuing to invest in building nuclear reactors. They plan to construct 15 reactors and two research reactors; they already have two other reactors in Bushehr, on the coast of the Persian Gulf, which were started during the Shah's time but never finished, then bombed and damaged by the Iraqis during the Iran-Iraq war. The Iranians recently have been looking for someone willing to repair these two reactors and finish building them. They have run into trouble on that because of American pressure on various countries to keep out of this activity. Iran lately has reached an agreement with the Russians, who are to put the two reactors in Bushehr back in working order.

In 1993, the Iranians signed a deal with Russia to build them another two reactors. In addition, they concluded a deal with China, which is to supply them another reactor or two. This would give them five or six reactors. Further, they are trying to obtain research reactors, primarily from China. In other words, the situation now is that the Iranians do not have a single reactor. Everything is agreements and deals that are supposed to be realized in future years, and not one reactor has been built or completed so far. They also do not have a serious research reactor apart from an old small one that the Americans gave Iran in 1967 when the Shah was in power. There is no doubt, however, that the Iranians' efforts to acquire five or six reactors and one or two research reactors definitely might indicate intentions to acquire a nuclear capability going beyond civilian uses. Even a reactor for civilian use could produce plutonium that a country could use in years to come for creating a military nuclear potential.

Another indirect sign of Iran's drive to obtain a nuclear bomb is that since the start of the 1990's, the Iranians have been buying equipment that has nuclear significance. They have been buying it all over the world: in Europe, China, Russia and third world countries. This

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equipment is used to enrich uranium, which can be exploited for military nuclear development. Part of the problem is that this equipment can be meant for both military and civilian uses. And that is part of the difficulty of making an effort to block the supply of this equipment to Iran. The Americans have been making notable efforts in that respect.

The third indirect sign is that the Iranians in recent years have been making great efforts to train nuclear personnel. That includes technical and scientific training, both in Iran itself and in western universities. They also are trying to bring home Iranian scientists who fled Iran after the Khomeyni revolution by enticing them with fat salaries and promises that nothing bad will happen to them and their families upon their return to Iran.

In addition to these three primary indirect signs, various intelligence services have more concrete information on Iran's campaign to acquire the ability to produce nuclear weapons.

One can say from all this that the Iranians by all appearances have decided to undertake a military nuclear program, or at least to develop a military nuclear infrastructure which, if they so decide, they could use to do this. But the timetable is not clear. Top intelligence officials in Israel and the United States believed late in 1992 that Iran would attain a military nuclear capability within eight to 10 years - unless they enjoyed a breakthrough; that is, if someone were to supply Iran the equipment or knowhow so that it would be able to shorten the timetable. Today, even though two years have gone by, we are still speaking of eight to 10 years as the time frame for Iran's achieving a military nuclear capability. While the American Secretary of Defense was visiting Israel this week, he spoke of long years before Iran could attain a military nuclear capability. Yitzhaq Rabin talked about seven to 15 years. These two statements shed light on the difficulty of estimating a timetable in which Iran will be able to obtain nuclear weapons.

**Avidan:** Why does this have to take so long?

**Qam:** In the first place, Iran's nuclear program is in its infancy. Second, true, they are buying equipment (for building nuclear weapons) everywhere on a significant scale, but it is unclear how much synchronization there is in the purchase of this equipment. Since they cannot buy whatever they want in an orderly way, they buy here and there, wherever they can. It is unclear how much all this is bringing them to an integrated, systematic program. It also is not clear how fast they will be able to train their scientists. There are all sorts of reports that they are trying to use nuclear scientists from Russia and the Commonwealth of Independent States, but I do not know if that is true. I am not sure that a country like Iran would want to introduce non-Iranian scientists into so sensitive a program. So far as I know, that had not happened as of last year. There also were some leaks during press briefings from American intelligence circles

to the effect that the Americans see a difference between the Iranian and the Iraqi nuclear programs. The Iraqi activity they saw was accelerated. It is much slower with the Iranians. That could also slow down Iran's timetable for acquiring a military nuclear capability.

**Avidan:** Is it that the Iranians do not have enough money?

**Qam:** That is another cause. A nuclear program costs a lot of money, and because of the severe economic situation in Iran, the Iranians have money problems in funding all their military improvement needs. To that can be added another factor that could slow down Iran's nuclear build-up program: American efforts to block it, particularly by plugging the pipelines that supply Iran material for its nuclear program. The Americans have had limited success. They have the problem of securing cooperation from both the Europeans and American companies, especially in selling Iran equipment that can be used for both civilian and military purposes.

**Avidan:** Who are the leading sellers of "dual-use" equipment to Iran?

**Qam:** Several European countries, particularly Germany, Switzerland and possibly France. The Iranians have also tried to obtain equipment from the Czech Republic and third world countries such as Argentina and Brazil. They have tried to get certain materials in the Commonwealth of Independent States, in Kazakhstan, for example, which has a nuclear capability from its days as part of the Soviet Union, and in Russia and China.

**Avidan:** Does it have relations with Pakistan?

**Qam:** Yes, but it is unclear just how significant they are. The question is whether Pakistan (which has a military nuclear capability) is prepared to help the Iranians in this field so that one of Pakistan's neighbors with an "outlaw" image would have a nuclear bomb. I doubt that is in Pakistan's interest. But certain relations between Pakistan and Iran exist. There is a very broad range of nations with whom the Iranians are linked through such agreements and others for supplying very specific equipment, transferring information or providing consulting assistance.

**Avidan:** How is it possible that American companies supply equipment for Iran's nuclear program?

**Qam:** The American government has a hard time telling companies that want to make a profit not to sell equipment to the Iranians when the companies claim that it is not intended for military purposes.

**Avidan:** What about the possibility that Iran might buy a ready-made atom bomb from one of the CIS states that has nuclear weapons?

**Qam:** There is no precedent of a country that possesses a nuclear military capability selling a ready-made bomb, or even one almost ready, to another country. There once were reports that the Iranians were trying to buy an

off-the-shelf nuclear bomb in Kazakhstan, but these reports turned out to be untrue. Theoretically, this could happen in the future, but the chances of a responsible state providing a ready-made nuclear bomb to Iran are not high.

**Avidan:** So maybe all the alarm about Iran's nuclear potential is a bit exaggerated.

**Qam:** I think that the alarm is somewhat exaggerated. The possibility that Iran might acquire the ability to produce an atom bomb certainly is a worrisome issue, and I cannot say that it will not acquire that ability. But this story is neither simple nor certain. In any case, this is a matter for the far future, beyond the middle of the next decade. Until then, all sorts of things can happen. On the one hand, the timetable could be speeded up by certain short cuts that are not at all simple; on the other, the timetable could be longer. The nuclear program could get bogged down because of a problem in resources, a lack of equipment or other difficulties. So while the story is definitely troubling, there still is a very long road before they get to the end. We must do what can be done to prevent this; it is not hopeless.

**Avidan:** What tracks are the Americans pursuing to block Iran's military nuclear program?

**Qam:** The Americans have announced as an official policy, more or less, that they want to head off the Iranian military threat, particularly the nuclear threat. They are engaged in continuous and intensive contacts with a long list of states in Europe and the third world, and with Russia and China, in an attempt to block all equipment that seems to them suspect, such as anything that could serve both a nuclear program and other worrisome military programs, including the Iranian missile program, chemical weapons and so forth. The difficulty for the Americans, as I said, is that the Europeans, especially for economic and financial reasons, are in no hurry to give in to the Americans and agree to America's demands.

The bottom line is that America's success, while significant, has been limited.

**Avidan:** How do the Americans assess the danger to the Middle East of the possibility that Iran will obtain nuclear weapons?

**Qam:** It has them very worried. I do not think that the Americans believe that the moment that the Iranians acquire a military nuclear capability, it will use it for aggressive purposes. We also need to think in such terms just now. But if Iran does acquire such a capability, it will be the only state in the Islamic-Arab region (excluding Pakistan) with a nuclear capability, and will change its tune. Arab nations threatened by Iran also will speak differently. If a country is backed by nuclear weapons, it is a different story when it tries to dictate terms and demands during a crisis or confrontation than if it lacks a nuclear capability. In other words, Iran's military

nuclear capability, to which the Arabs would have no answer, would establish its hegemony throughout the Persian Gulf region in a more significant way.

**Avidan:** Is Israel Iran's primary target for dropping a nuclear bomb? Or is it Iraq?

**Qam:** Definitely not. The main reason that Iran has gone the nuclear route is Iraq. Iran's biggest problem and its number one enemy, in the overall picture, is Iraq. The Iranians have not forgotten that it was just in the last decade that Iraq forced on them the worst war in modern Middle Eastern history. The war was traumatic for them; to this day, they have not recovered from the destruction it wrought. They want to prevent a repetition of the weaknesses that the war exposed in them in the nuclear realm, in missiles, the air force, armor, arms supplies, the defense industry and so on. The war revealed six or seven areas in which the Iranians were strategically weak. One of those was the nuclear field. So they told themselves that it would never happen again. Iraq, therefore, stands first on the list of targets to be threatened by Iranian nuclear weapons. This is not to say that they would drop an atom bomb on Iraq. I assume that even a country known to be fanatic, such as Iran, would behave with a reasonable degree of responsibility. But, if it had a nuclear capability that everyone knew about, it could dictate demands in a different way (to Iraq and other countries) when necessary.

The second target is the United States. Again, this does not mean that Iran is going to drop a nuclear bomb on the Americans. It is completely unthinkable that this would happen. But if they were to be in a crisis with the Americans, they would assume that the Americans would behave differently if Iran were backed by a nuclear capability. These are the first targets on the list: Iraq, the United States and the Persian Gulf region in general.

**Avidan:** Where is Israel on the list?

**Qam:** Israel comes after the others. The Iranians have known for years that Israel has a military nuclear capability. It is clear to them that no Arab country is close to that, and that includes Iraq, which has been foiled twice: once by Israel and the second time by the Americans during the Gulf War four years ago. The Iranian view is that once they acquire a nuclear capability, they will constitute a regional Islamic balance to Israel's nuclear threat.

**Avidan:** What Saddam Husayn once wanted to be?

**Qam:** Yes.

**Avidan:** What budgets does Iran have for developing an atom bomb? We have heard that Iran is mired in economic straits and is suffering to some extent from a lack of internal stability. Is it possible to be stuck in an economic crisis and also to develop nuclear arms?



**Qam:** It is possible, but that makes it much harder. They can decide that despite the dire economic situation, and despite the fact that this has already begun to stir up unrest and discontent among the population, they will go on allocating money for the nuclear program and the military build-up program in general. But it is much harder. Looking at the military situation as a whole, one interesting thing is what is happening in the military build-up program for conventional weapons. There was a spate of reports at the beginning of the decade that the Iranians were going to invest considerable resources in military procurement. There was talk of a five year military build-up plan, from 1990 to 1995, which is now coming to a close. That included establishment of a new and much bigger air force, a new armored corps, a revamped artillery corps and so forth. What is interesting about this is that what actually happened was far below the predictions and the reports about deals. They are only now beginning to modernize their air force with new Russian planes, and in numbers that are not so great. They have begun to update the armored corps by buying several hundred tanks, but compared to the thousands of tanks that Iraq has, this still leaves Iran in an inferior position.

**Avidan:** Is the main reason for this a lack of money? Iran is said to have debts of \$30 billion and to be making agreements for rescheduling its debts to the creditor nations.

**Qam:** This is occurring mostly because petroleum prices are declining and the Iranians also need to invest vast sums in restoring the infrastructure that was destroyed during the Iran-Iraq war. They need, all at the same time, to invest in repairing the civilian infrastructure, in a conventional military build-up and in a nuclear program. That is a lot. They also have a perpetual need to pay close attention that these investments in the nuclear and military fields as a whole will not be at the expense of the resources that they are putting into the civilian sector, which is already beginning to show unrest, the final result of which is not clear. From the signs, however, most experts believe that the social ferment is still such that it does not endanger the Iranian regime. But no one knows whether this will turn into an unstoppable wave; if so, the whole nuclear story could also be aborted, particularly if something were to happen to Iran's regime and a more moderate one were to take power during the decade.

**Avidan:** Do you see the possibility that a pragmatic regime will return to Iran?

**Qam:** When you talk in terms of a decade, it could happen. Maybe not a return to the Shah's government, but a middle ground regime, falling between the Khomeyni and Shah regimes, could arise.

**Avidan:** Could you be more specific about the ways in which the Iranians are trying to develop a nuclear capability?

**Qam:** The impression I have gotten is that they, as the Iraqis did in the past, are going down more than one path, hoping to see how they can manage a breakthrough. Most reports indicate that they are going the uranium enrichment route. There also are reports here and there, however, that they are pursuing a parallel route of separating plutonium. Although they still do not have active reactors, there are things they can do, in laboratories, centrifuges and other facilities, even without a reactor. Their one small research reactor, as I mentioned, dates from 1967. It is located at the University of Tehran, which is one of the most important nuclear centers in Iran.

Incidentally, it appears that as a lesson from Israel's strike on the Iraqi nuclear reactor, the Iranians are spreading their nuclear activities around a number of central sites. There are five major nuclear installations in Iran, some of them hundreds of kilometers apart in order to diffuse the risks and hinder an attack on them. And they are taking into account the fact that someone would like to attack them.

**Avidan:** Who in Iran is responsible for nuclear operations?

**Qam:** The assumption is that President Hashemi Rafsanjani is personally overseeing all this activity, which is natural. In so critical and sensitive a matter, it is reasonable that Iran's political leader should be the one who holds all the strings. There also are some Iranians, such as the chairman of Iran's Atomic Energy Commission, who have been identified as playing important roles.

**Avidan:** What is the significance of Iran's signing of the Nuclear Non-Proliferation Treaty? Can international inspection of its nuclear facilities assure that they will not serve as an incubator for hatching nuclear weapons?

**Qam:** Iran categorically denies that it is developing a military nuclear capability. Unlike Israel, it has signed the treaty on preventing the proliferation of nuclear weapons. It also has invited inspection by the International Atomic Energy Commission in order to dispel the suspicion that it is going into the military end of nuclear energy. There have been at least two such inspections in recent years at a number of nuclear sites. The committee that made the inspections there said that it found nothing suspicious. This provides, on the one hand, a certain measure of supervision over the Iranians, but it is not enough. Iraq also signed the non-proliferation treaty and invited inspection of its nuclear installations, but it deceived the inspection team. That could also happen in a country such as Iran, in which the nuclear sites are dispersed.

**Avidan:** What is the status of Iran's program to acquire North Korean Nodong ground-to-ground missiles with ranges that can reach Israel?

**Qam:** Iran, learning a lesson from its war with Iraq, has also decided to make a major investment in missiles. The

trauma of the bombardments of Iranian cities by Iraqi missiles during the war led the Iranians to realize that they had to do something in this area rather than stand idly by. While the war was still being fought, the Iranians, in reply to Iraqi missile attacks, rushed to obtain Scud missiles of the then-current model. They got a few missiles from Libya and bought a few from North Korea. When the war ended, they decided to put money into missiles, both buying additional Scud-B and Scud-C missiles and assembling and later producing Scud missiles of their own. One of the Iranian arms industry's primary projects is missiles. At a minimum, they are assembling Scud missiles and very likely will soon advance, if they have not already, to the stage of independently manufacturing the missiles. These missiles do not have the range to reach Israel. What concerns Israel, therefore, are Iranian efforts to acquire a longer-range missile that can reach Israel. That missile is the North Korean Nodong, whose features are not sufficiently known. It has gone through testing and apparently is operational or about to become so. It also seems that there was an agreement by which North Korea would supply these missiles to Iran. The reports also indicated that the Iranians wanted to extend the range of the Nodong missile to 1,300 km so it could strike any place in Israel. Originally, the missile, which is a development of the Scud-C, apparently had a range of 1,000 km.

The Iranians, apparently, paid the North Koreans to develop this missile. That was part of the deal. What happened, so far as can be known, was that Iran was about to take delivery of the first shipment of the missiles late in 1993. At the last moment, when it was assumed that the first ship carrying the missiles was already on its way out of port, the shipment was stopped, apparently due to American pressure on North Korea. To this day, it seems that Iran has not received the missiles. What will happen after this, no one knows: whether the North Koreans will continue to hold up the shipment under American pressure, or, because of their relations with the Iranians, will feel themselves free from now on to send the missiles. Those are the two possibilities.

**Avidan:** And if Iran gets the Nodong missiles, would Israel be a target for them, or would they be aimed, for example, at Iraq or Saudi Arabia?

**Qam:** If they buy the Nodong, that definitely would create a problem for Israel because the Iranians do not need the Nodong to pose a threat to Iraq. The ranges of the Scud-B and Scud-C are enough for that. If they buy a missile with a range of 1,000 km and up, the main target is Israel. That is not to say that they are going to launch the missile at Israel, but they would have a weapon that would serve as a deterrent against Israel.

**Avidan:** I believe that Syria also is collaborating with Iran to produce the Scud-C.

**Qam:** That may be. But the Iranians' main effort in missiles is collaboration with the North Koreans, particularly on any matter relating to the Scud-C and the Nodong.

The Iranians also have been producing shorter-range missiles for years. These are actually guided rockets, an offshoot of the old Russian Frog, which have a range of dozens of kilometers. In this endeavor, the Iranians have been cooperating more with China than with North Korea. The Iranians have been working with China on short-range missiles and with the North Koreans on medium- and long-range missiles.

**Avidan:** Does a danger exist that the Iranians will transfer nuclear or ground-to-ground missile information to an Arab country?

**Qam:** In the nuclear field, I do not know whether they now have anything to transfer. I also do not know what Arab country needs it, aside from Iraq, whose relations with Iran at the moment are not such that would permit joint action in nuclear matters. As for Syria, so far as I know, it is not now engaged in developing a military nuclear capability. With respect to developing ground-to-ground missiles, Iran might help Arab countries. Iran is investing its efforts, among other things, in extending missile ranges. It may be that there is room here for cooperation with the Syrians in particular. Syria is likely to need such information, and it is the Arab country closest to Iran.

**Avidan:** Do the Iranians have chemical and biological weapons?

**Qam:** The assumption is that they do, but almost nothing is known about that. Most of our information concerns the more prominent matters of missiles, atomics and conventional capabilities, rather than chemical and biological weapons. But there is some information regarding development of chemical and biological weapons in Iran.

**Avidan:** Are there indications of Iranian terror against Israel?

**Qam:** There are more than indications in three areas: First, Iranian assistance to Hizballah, which is the most significant and comprehensive (of the Islamic terrorist groups). Second, support for Islamic-Palestinian organizations. This is mostly financial with much less involvement than in the aid to Hizballah. Third, their involvement in a number of separate attacks, such as in Argentina and Britain and one or two in Turkey. By the way, Turkey is one of the countries in which Iran is highly involved in terror. The Americans have said outright, and they know more than I do, that Iran is the most active nation in the world in terror. But it would not always be correct to blame Iran for every act of terror carried out by an Islamic group.

#### **Kazakhstan-U.S. Uranium Deal Attributed to Iran Problem**

95WP0036Z Paris AL-MUHARRIR in Arabic  
12 Dec 94 p 11

[FBIS Translated Text] Three American military C-5 transport planes carrying 600 kg of uranium, enough to make 20 nuclear bombs, landed at Dover base in the

middle of last month. The arrival of this huge load of radioactive material epitomizes the execution of one of the most secret intelligence operations in the Cold War between America and Russia. This is a very strange operation executed by a big nation in order to deprive another nation—Iran—of owning nuclear arms.

The preparation for this operation started in August 1992. At that time the American CIA received information affirming that Iranian nuclear experts had visited the former Soviet Republic of Kazakhstan, which is home to the largest amount of saturated uranium in the disintegrated Soviet republics, in order to learn about the Kazakh nuclear program.

Although the Kazakh Government declared that this information was false, Western intelligence sources affirmed that the Iranian mission brought back with it to Iran small amounts of uranium and beryllium for the Iranian nuclear program, which was scheduled to produce the first bomb within five years. At that time, there were many rumors that Iran had purchased two or three manufactured nuclear weapons from Kazakhstan. These rumors were later proved to be false. The media in the West, Middle East, and Europe were competing in exaggerating those rumors and making up "stories" around them. However, that same year, the Americans convinced the new Russian administration that America was ready to buy the uranium from Kazakhstan and transport it back to the States to be remanufactured. America would then dispatch to Russia the uranium she needed for nuclear fuel. Consequently, the Americans succeeded in stopping the Kazakhs from selling to Iran the radioactive material she had dreamed of. A meeting that could be described as a "war council"—composed of representatives from the CIA, the Pentagon, and the State Department—to discuss means to acquire the Kazakh uranium before it was passed to the "United States' enemies abroad" was convened in Washington. This meeting was convened in case the Russians refused the American proposal. During the Washington meeting, the Pentagon submitted a military proposal to send an American special force to occupy the huge factory located at Ulba, which lies 1,500 km northeast of the Kazakh capital. The factory employs 14,000 workers and contains 1,000 metal cubes filled with stored uranium material.

However, at the end, it was decided to ask the American ambassador in Kazakhstan, William Courtney, to conduct diplomatic negotiations with the Kazakh Government. At that time, since Washington had agreed to pay a few million dollars, the American State Department was negotiating with Moscow in order to secure her agreement for America to transport the uranium.

The American air operation named "ruby" (because of the scarcity and importance of uranium) was the result of the two-year negotiations and was executed last November. Thirty-one American nuclear experts aboard three military planes made a non-stop flight from Dover base to Kazakhstan and landed at Ulba airport. Accompanying the

nuclear experts was a special forces division that carried to the United States the 600 kg of uranium that was contained in the metal cubes. The American President Bill Clinton had signed the transportation plan that was submitted for his endorsement on 7 October 1994.

As soon as the uranium arrived at Dover base, it was transported to a nuclear storage base near the Oak Ridge region in Tennessee. In this manner, Iranians would be unable to meet their need for this important material for the manufacture of their nuclear weapons. Although the Americans are still convinced that their operation may slow down the Iranian effort to meet their goal, it will neither stop nor put an end to this effort.

### **Denials of Indian Participation in Iranian BW Plants**

#### **Indian Spokesman**

*BK3101151595 Delhi ISI Diplomatic Information Service in English 1431 GMT 31 Jan 95*

#### **["Spokesman's Statement"—ISI Headline]**

[FBIS Transcribed Text] In response to a question relating to a report in THE INDIAN EXPRESS today on the setting up of nerve gas plants in Iran by Indian companies, the official spokesman stated that this was not the first time these allegations have been made and that THE WASHINGTON TIMES had carried similar reports in early December 1994.

Clarifying the position, the spokesman said the projects for the construction of pesticide factories in Iran were put out to international tender and Indian companies won these tenders in open global competition. The spokesman added that no fears were expressed then by the competitors or the countries they came from about the nature and possible use of these plants.

The spokesman further clarified that India has no chemical weapons, and Indian companies, therefore, have neither the technology, equipment or expertise to set up plants to manufacture these weapons. He recalled that India was an original signatory to the Chemical Weapons Convention [CWC] and adopted a stringent export licensing mechanism to control and monitor exports of dual use materials and equipment even before the convention was finalised. Where the proliferation has taken place, the record shows that this has been with the assistance of companies from industrialised countries, including those which run ad-hoc export control regimes ostensibly designed to prevent this from happening.

The spokesman noted that the CWC does not prevent exports or the transfer of technology for peaceful uses and contended that reports like these only reinforce fears in developing countries that the bogey of proliferation is being used against their industries, which now compete effectively with those of the industrialised world.



**Tehran Radio**

NC0102065395 *Tehran Voice of the Islamic Republic of Iran First Program Network in Persian 0430 GMT 1 Feb 95*

[FBIS Translated Text] An Indian External Affairs Ministry spokesman has described reports by Western sources that poison gas is being manufactured in Iran with India's help as ridiculous and illogical. The spokesman said yesterday that these false reports are being published in a bid to reinforce fears in the developing countries. He pointed out that Indian companies have won in bidding for the construction of a pesticide factory in Iran.

**IRAQ****'Head of Saddam's Germ Warfare Project' Profiled**

MM0602163495 *London AL-SHARQ AL-AWSAT in Arabic 29 Jan 95 p 2*

[Report by Alan George: "Head of Saddam's Germ Warfare Project Received Her Education and Experience in British University"]

[FBIS Translated Text] London—A former Iraqi expert in the mass-destruction weapons program has revealed that the head of the Iraqi secret biological warfare program received part of her experience at East Anglia University in Norwich. And that the scientific supervisor of her studies still remembers her as a nice lady and one of his best students. The former expert said that this lady—who confirmed to UN weapon inspectors that she is the head of Saddam's Husayn's biological warfare project—obtained her PhD degree from the Biology department at East Anglia University in 1984. Her thesis was entitled "Studies on Tabiotoxin [as transliterated]," a toxin produced by a pathogen that affects the tobacco plant.

Professor John Turner says about the lady's personality: "She was absolutely wonderful. She was an exemplary student, a hard worker, and sincere in her scientific research." In Iraq the doctor supervised in Iraq a program for producing anthrax, botulism, and the "gangrene" gas. It is worth mentioning that victims of the first two diseases suffer terrible pain before dying. As for the "gangrene" gas, it leads to the explosion of skin tissues.

Dr. Turner, a lecturer in the Biology Department at the university in question, stressed that his student's studies at East Anglia University were not directly associated with microorganisms that affect humans.

He said, "we are a group of people specializing in medicinal plants. We do not operate on human beings or animals." When told about the doctor's role in Saddam's military projects, Dr. Turner said: "I am absolutely astonished. I just cannot imagine that a person like her would get involved in work like that."

The Iraqi doctor joined East Anglia University after she obtained her first degree from an Iraqi university. She obtained her PhD and returned to her country to work as a lecturer at the university. Dr. Turner said that "we have not been in touch since, even though we exchanged Christmas cards for a while."

In the late eighties the lady became head of Saddam Husayn's germ warfare. At the beginning Iraq told UN inspectors that it had no program of this kind. But last year Iraq changed its tune. However, it claimed that the project was small and limited to researches concerning methods of defense against biological attacks. Baghdad claimed that only 10 scientists worked in the project under the supervision and management of the doctor in question, and that the program had achieved only meager progress when the Gulf crisis erupted in 1990-1991. But the UN special committee expresses suspicion over these claims. All employees on the projects—including the doctor in question—were interrogated by UN inspections, and they all tried to evade [questions]. Their statements on the main issues were contradictory.

Swedish diplomat Rolf Ekeus, head of the special committee, said in an interview transmitted by NBC that "the Iraqis have bacteria allocated to war purposes." The committee is expected to send a group of inspectors to Iraq to inspect biological warfare installations.

The Iraqi biological program is situated in three locations: an installation built by the Germans in Salman Bak [as transliterated], south of Baghdad; a research center near al-Iskandariyah, 25 miles southwest of Baghdad; and another installation called "al-Hakim" in the desert, 80 miles west of Baghdad.

The [Iraqi] doctor is the director of the "al-Hakim" project, which is believed to be a factory for producing a single-cell protein for animal feed. A Western official familiar with the installation said that it cannot make a profit in the economic sense as a food factory. The UN special committee's suspicions were aroused because of the type of equipment present at the three locations. For example, the Salman Bak includes a huge fermentation tank (for growing and mixing microorganisms) and a test room for examining spraying [al-rashsh] technologies, in addition to filling machines which can be used to fill warheads.

The UN committee will work to inspect more than 80 locations, believed to be important as regards biological weapons, beginning with the large installations like the one in Salman Bak through to the small laboratories at universities and hospitals.

The lady in question is not the only person responsible for the weapons programs who received training in Britain. Dr. Ja'far Diya' Ja'far, head of Saddam's atomic bomb project, obtained his Master's degree from Birmingham University and his PhD from Imperial College, London University.

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## ISRAEL

### Possible Nuclear Launch Sites

95AA0067A Tel Aviv HA'ARETZ in Hebrew  
16 Dec 94 pp 18-20,22,24,26

[Article by Mickal Peleg: "Conspiratorial Mountains"]  
[FBIS Translated Excerpt] On the morning of 14 November the residents of 'Ilbun awoke in their homes on the mountain ridge wrapped in white fog and the chill of the start of winter, amazed to learn that they were now on Israel's nuclear map—as it was sketched in the British monthly JANE'S INTELLIGENCE REVIEW, and quoted in all the Israeli newspapers.

A storm of controversy raged for two or three days, after which everything went back to normal. A week passed and another week, and no one showed up in the village in the Galilee to confirm or deny the news. "People were frightened, but they did not do anything. What could they do?" summed up the owner of the al-'Arin Minimarket, which store's newspapers ran out in the early hours of the day the news broke. The minimarket sits in the center of the village, opposite the new pastry shop, a small women's clothing store, an insurance agency, a lawyers' office and a large billboard for Aminoah mattresses.

'Ilbun, with its 3500 inhabitants, is no longer a village but a small town, modern and well-informed. The residents of 'Ilbun tensely followed the item, according to which Israel is storing a significant number of her tactical nuclear missiles close by; but the echoe. of that report died quickly and disappeared from the pages of the newspapers just as they had appeared. "If it is true, it is very frightening," the owner of the minimarket said. [passage omitted]

Israel's fog-enshrouded missile policy has been fertile ground for speculation, guesses and hints for dozens of years. Until recent years, the murky, partial information published from time to time in the world's newspapers has served Israel's deterrence strategy. The names of two sites have been well-known here to everyone for a long time: the nuclear reactor in Dimona and the research reactor in Nahal Soreq. In addition to that, since the Russian satellites began offering their services to all comers, the dam has broken. In professional periodicals abroad over the last few years, detailed reports have appeared about what is seen by them as nuclear weapons sites, as it were, in Israel, that were not previously known: In 1993 a satellite picture appeared in AVIATION WEEK showing, according to that weekly, bases of this sort in three locations: Be'er Ya'agov, a site adjacent to Jerusalem, and Tel-Nof. In an article published last month in the British monthly JANE'S INTELLIGENCE REVIEW, even more detailed pictures appeared, deriving from a French satellite and from Russian satellites. The timing of the report is considered particularly damaging to Israel since in March 1995 the international treaty against the spread of nuclear

weapons will be renewed—a treaty that Israel is not interested in signing—and the article will help apply international pressure against her. Under the title "Israel's Nuclear Infrastructure," writer Harold Yew described seven sites in Israel. Three of them, Yodfat, 'Ilbun and Kfar Zekharya, were mentioned for the first time in this context.

The Nuclear Research City and a burial site for nuclear waste near Dimona have occasionally come up for public discussion in recent years even in Israel itself, despite the fact that, unlike other Western countries, no broad-based opposition movement has developed here to the nuclear issue. A very rare protest demonstration occurred on 1 December 1991 when dozens of demonstrators stood opposite the nuclear reactor in Dimona and called for the nuclear disarmament of the Middle East under U.N. supervision and for the release of Mordekhay Vanunu. It took almost 26 years for a report of an accident in Nuclear Research City that occurred in 1968 to reach the public. Following the discovery of radioactive waste from the Institute for Nuclear Medicine in a trash dump in Giv'atayim, and after the appearance of pollution in water runoff in the Negev, the Atomic Energy Commission was forced to reveal the location of the nuclear waste storage site near Dimona.

The removal of the waste and its transport are accomplished by Nuclear Research City workers, and a network of radiation monitoring stations that the Ministry of Environmental Quality is completing the deployment of just now, was built by the Rotem Corporation, which belongs to Nuclear Research City. The manufacturing body is, thus, also the body responsible for control. In the U.S. it has become clear that in such instances, when mistakes occur—and by American experience mistakes occur all the time—the stay in the family. The Ministry of Environmental Quality's monitoring stations are set up near Tel Aviv, Kfar Hasidim, Jerusalem, Be'er Sheva' and Dimona, as well as a maritime station in Haifa. The ministry announced that it is an open system, the findings of which are open to the public.

The initiative for transferring supervision over the dangers of radiation from the Atomic Energy Commission to the Ministry for Environmental Quality stemmed from the recognition that "it is impossible to leave supervision in the hands of the body that has nuclear devices itself," said Deputy Director of the Ministry for Environmental Quality Shmu'el Brenner. He explained that each monitoring station covers a radius of just one kilometer. Should a radioactive cloud reach Israel, he said, it is likely to be picked up by one of the stations. In Galilee there is no such monitoring station. "There is no room for panic on the radiation issue," Brenner concluded, "if it were a problematic situation, we would already know about it. The entire country is safe."

We visited 'Ilbun, Yodfat and Kfar Zekharya—the three small settlements that the monthly JANE'S put overnight on the international threat map. In Yodfat, an

elitist moshav occupied with organic agriculture, and a mecca for devotees of harmony and environmental awareness, they simply do not believe it and dismiss it out of hand—just like the Atomic Energy Commission—as sensationalist reporting; the inhabitants of Kfar Zekharya, most of them originally from Kurdistan, tend, on the other hand, to believe it, but accept it as an edict from heaven. In 'Ilbun, a small Arab town that has had its share of troubles, the inhabitants are concerned and fearful.

Fate has chosen several times already to elevate this quiet Galilean village, most of the inhabitants of which are Christian, onto the stage of history. Almost every time, the State of Israel took pains to remove its name from there and wipe out all traces. In October 1948, after the withdrawal of the Arab Liberation Army from the village, the people of 'Ilbun waved white flags from their rooftops, gathered in churches and sent priests to greet the IDF soldiers; but in one of the homes, soldiers of the Golani Brigade discovered the decapitated heads of two Israeli soldiers. [passage omitted]

Raziq Ha'ik is one of the exiles from 'Ilbun who returned—he was a boy when he left with his family on the journey to Lebanon. When they returned they found total destruction, he remembers. "They took everything from us—our homes, our cows, our olive trees. There was no food." Today he sits in the doorway of his grocery store, on the lower floor of a nice palatial home, the construction of which was just completed. The quiet mountain scenery spreads out all around, the village streets are clean and the homes are well-cared for. "It is too bad that not everywhere in Israel is like 'Ilbun," says Ha'ik, "there is no conflict here, no drugs. The people are educated. And the missiles—I am not afraid. They are talking about it now in Britain." [passage omitted]

In February 1954, Minister of the Treasury Levi Eshkol issued a confiscation order against a considerable portion of the land area of 'Ilbun. The official pretext was that the land owners prevented the Israel Water Planning Authority Corporation from carrying out its work, because the Communists incited them to oppose the theft of their lands. During that same period there were those who took pains to paint the village as one of the "fortresses of Communist Party strength in Israel," and to spread a story about the "red priest" from 'Ilbun, Father 'Elias Zuraiq, who was scolded by the Greek Patriarch for his political activity. An attempt was also made to declare the village lands abandoned property because the residents "fled in the War of Independence and returned only after a period of time." In the end, the farmers of 'Ilbun accepted compensation that was lower, they claimed, than the value of the lands. Some of the residents were accepted for employment as laborers in digging the water tunnel, that was dedicated in full ceremony in March 1956.

"Nonsense," averred Judi Sarur, a private investigator and former policeman. He joined a women's conversation held over a cup of coffee and a cigarette, in the

women's clothing store in the center of town about the reports published in the monthly JANE'S. The discussion was heated, the women sounded concerned, they spoke about their children and about the future. Mary, the store owner, said explicitly: All the villages around here are Arab. Sarur laughed: "I do not believe a word that was published; I am willing to bet on it." Afterward he described in very professional language the strange event that occurred in 'Ilbun in 1982, of which all the residents of the village were fearfully reminded following the reports quoted from JANE'S.

"During the War in Lebanon," Sarur said, "they brought here weapons seized as booty. One day we heard a series of mighty explosions. The event took place because of a Clark truck that was traveling last and hit a wall, as a result of which a spark landed on a plastic surface. A fire broke out and missiles began to explode. Air Force planes came and bombed the area in order to finish the thing off at one blow."

This story is retold in various versions by all of the people of 'Ilbun: Some of them believed then that the war had come to their home, or that Katyusha missiles had fallen in the vicinity. Dr. Hanna Suwayd, the council chairman, remembers well that day in the summer of 1982: "Missiles fell over the whole area like flies," he relates, "even in the built-up area of the village, here, 30 meters from the council building. Damage was caused to homes, glass shattered throughout the whole neighborhood, and cracks appeared in the walls. It was our great good fortune that no one suffered physical injury, but it was a terrible day. People ran to the shelters, they thought it was an aerial bombing of the village by non-Israeli planes. From the windows they saw missiles falling on the mountain. This incident points to a serious danger."

Dr. Suwayd, who holds a degree in engineering and architecture, was elected to the chairmanship of the council at the head of an independent list. This year he was also elected to serve as a member of the National Planning and Construction Commission under the auspices of the local Arab authorities. He followed with concern the reports published in the press abroad about the storage of tactical nuclear weapons in the vicinity of his village. "It is my intention to appeal to the Ministry of Health and request its opinion, and to the Ministry of Energy. I am weighing the possibility of bringing a certified physical laboratory here, perhaps from the Technion, to conduct tests. In the meantime I have purposely delayed the matter in order not to create confusion and an atmosphere of danger. I have let the matter cool off a bit so as not to have the people panic-stricken."

"Last summer, too," says Suwayd, "there was a big fire on the eastern border of the precinct, and helicopters arrived to put out the conflagration. It must be noted that there is a plan by the Kinneret Group to establish a quarry adjacent to the camp, and there was always

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opposition from the Defense Ministry; recently they got rid of the opposition. Of course, if the quarry is set up, there will be big explosions here, and that is a source of danger."

The village of 'Ilbun is now at the height of a building and development boom, indications of which are scattered throughout the entire area in the form of signs about the implementation of work planned by various government ministries. At the entrance to the village is an industrial area; on the ridge a new housing neighborhood is being built for 15 families that arrived from the neighboring village of Mar'ar. There are about 3,500 residents in 'Ilbun today: Most of them, says Suwayd, are independent professionals—teachers, engineers, lawyers, etc. According to Interior Ministry statistics, the village is at the top of the socio-economic ladder in the Arab sector, parallel—and here a smile appears on the face of the council head—to Savyon and northern Tel Aviv. The village middle school requires matriculation exams, and the rate of success in them is 85 percent—the highest in the Arab sector. The economic situation is mid-range, Suwayd says, but people "find money" and travel abroad a lot.

'Ilbun's quiet surface hides a number of riddles: One of them is the fact that despite these glowing data, the settlement appears on Israel's depressed areas map, because of one of the economy's higher rates of unemployment, 12.8 percent. During a trip around the streets of the village, one gets the impression of a well-cared for and successful village, but many families are below the poverty line. Dr. Suwayd explains that these contradictions exist for several reasons; among other things he claims that there is a social norm in the village that everyone tries to meet—even at the cost of large bank overdrafts. The poor try to give the appearance of success—in clothing, cars, weddings and even in trips abroad. Another reason for the unemployment rates, according to him, is that, unlike other settlements, there are a lot of women in 'Ilbun who are interested in joining the work force and are registered as looking for jobs. [passage omitted]

It seems that just turning over a stone or peeking around a bush puts you in the doorway of a whole, mysterious world, or at the entrance to a time warp. In 1962, for example, at the height of the excavations for the National Water Carrier, an ancient tunnel was uncovered, that nearly two thousand years ago connected 'Ilbun, then a priestly watch village of the Haqutz family called 'Ilbu, to the Yodfat system of fortifications, yet another site whose name appears on the map of Israel's nuclear sites according to the monthly JANE'S.

The one thread that connects the moshav of Yodfat to the village of 'Ilbun is the ancient tunnel, and perhaps also what took its place, the National Water Carrier, that continues from 'Ilbun in 'Emeq Bet Netofa to the foothills of the Jewish settlement. [passage omitted on Flavivus Josephus]

Already back in the first years of the moshav, the young settlers were described as "seclusion-seeking recluses." Hikers who make their way to the place today will find homes hidden in thick, lush vegetation and total silence disturbed only by the rustling of the wind through the leaves and a cold reception. People in Yodfat prefer the world to stop at their threshold and not admit curious eyes and nosy fingers. The bus station is built of natural, unfinished wood beams, located away from the residential area; there is no public telephone; a structure bearing the sign "Community Center" houses the settlement's offices, and there, too, no one will agree to talk to reporters; the Commission secretary is even unwilling to open the door to his room. [passage omitted]

From the Yodfat observation tower one can look around and around over the Segev Bloc and the large research city of the Weapons Development Authority in Leshem; according to the report in JANE'S, Israel's atomic bombs are assembled in Weapons Development Authority "Unit 20" near Yodfat. At the bottom of the tower, on an old sign, you can just make out the inscription: "Yodfat was founded with the assistance of Jewish golf fans in Great Britain". [passage omitted]

The reports that appeared in the papers about the assembly of atomic bombs in the area were received here, at least outwardly, with a shrug of the shoulders and a raising of the brows: Unlike their Arab neighbors from 'Ilbun, the people of Yodfat do not believe the reports; the few who agreed to talk about it chose not to give their names.

A stroll through the rooms of the empty offices, whose large windows look out over a garden covered with fallen leaves, yielded a meeting with a friendly official from the neighboring Arab village, who led us to his Jewish counterpart in the moshav. The man was reserved; he barely agreed to give any information, which consisted, more or less, of the fact that there were sixty families in Yodfat. "With regard to the reports," he said, "I do not believe them. It makes no sense to me. It seems to me that it is a canard."

That same claim was repeated in the Yodfat convenience store. "The Arab lad who brings me the bread has access to the Weapons Development Authority, too, one of the store managers said. If there were atom bombs there, they would guard them a little bit better." The managers of the convenience store in Yodfat are two young lads with an up-to-date demeanor and stoic disposition. They summed it up this way: "You can also die in a traffic accident, or from cancer, or from being axed in the head in the main bus terminal." One of the female customers sent us out to look for those with concerns in the other settlements in the area: "There are always worriers out there looking for something to get all bent out of shape over," she said. Afterward she said that she had asked people from the Weapons Development Authority and they reacted with a smile: "If it were true, maybe they would not admit it—but they would not have smiled. In

the final analysis, even if it is true, what can we do about it? There is not a big difference if they are here or somewhere else. If there should be a radiation leak from the reactor in Dimona, would it not reach here? [passage omitted]

Melo Shaharbani raised his hand and waved with a finger threatening upward, toward the cloudy sky. "Remember," he said, "Only He decides, not people." I asked him if he had heard what they wrote in the paper about the nuclear missile base near his moshav, Kfar Zekhariah, and if he was worried. He looked at me severely and said: "When someone has a traffic accident and dies, they say it was because of the rain that he slipped on the road. It was not the rain. His number was up. From above." Afterward he passed his brown hand, furrowed with wrinkles, through his white beard, and before he turned to touch the half loaf of white bread on the shelf, he made his last comment: "Our government does not have true law. It is an illegal state." [passage omitted]

In Zekharya they still believe in agriculture: especially anemones for export, chicken coops and some plantings. Here and there stand remnants of abandoned hothouses and torn plastic sheeting turning grey from dust; after rose exports collapsed, they moved on to anemones, which grow in open fields at the foothills of the village. "What happens beyond the fields," said Yosi Moshe, "is of no interest to us. We have other worries."

For example?

"We are worried that we are close to the Bezeq satellite station in the 'Elah Valley: There are rumors of radiation from the station that puts the community at risk. Here in the area there are many cases of cancer deaths, and people have died suddenly at a young age. To the best of my knowledge, the danger comes from the satellite station, and the head of the Council has appealed to the Ministry of Health and the Ministry of Environmental Quality over the issue."

#### **Envoy Airls Doubts on Russian Role in Iranian Nuclear Facility**

*LD0802210195 Moscow INTERFAX in English  
1947 GMT 8 Feb 95*

[FBIS Transcribed Text] Moscow, Feb 8 (INTERFAX)—Israel is not fully satisfied with Moscow's assurances that the Russian-aided nuclear power plant project in Iran cannot be used for military purposes, Israeli Ambassador to Moscow Mrs Aliza Shenhar told a news conference here on Wednesday.

She reminded the audience of Iraqi missiles finding their way into Israel during the Desert Storm operation carried out by allied forces in Kuwait. "They did not have nuclear warheads", Shenhar said. She spoke of her country's serious fears over the construction of a nuclear power plant in Iran given the dimensions of nuclear smuggling in recent time.

On the Middle East peace process, Shenhar pointed to Russia's vital and constructive role in it.

On Chechnya, she said it was Russia's internal affair but pointed to an Israeli Foreign Ministry statement warning against human rights violations and expressing preparedness to provide humanitarian aid to the victims of fighting there.

However, we cannot bring more pressure as far as human rights are concerned given that Israel faces similar problems, Shenhar said.

### **PAKISTAN**

#### **Controversy Generated by Nuclear Explosion Monitoring Center**

##### **Seismic Detection System Installed**

*BK0902133495 Islamabad THE NATION in English  
9 Feb 95 p 1*

[FBIS Transcribed Text] Islamabad—In order to detect nuclear test explosions in Pakistan and its surrounding countries, an international seismic system has been installed at Chakwal, a Foreign Office source confirmed while talking to The Nation.

The system known as International Seismic Monitoring System has started operation. The source said that the said system is part of an agreement to monitor the nuclear test explosions under the Comprehensive Test Ban Treaty (CTBT). The source further disclosed that the system installed at Chakwal is being run by the Pakistani experts and there is no foreign personnel present at the facility.

It may be mentioned here that Pakistan for the last 30 years has been advocating ban on nuclear test explosions and has time and again stressed that both Pakistan and India sign the Treaty. The majority of non-aligned countries also support this positive proposal, the source added.

Replying to a question the Foreign Office source said, if India conducted an atomic test; this system would be able to detect it. When asked that this system has been installed to monitor the nuclear programme of a neighbouring Islamic country, the source said, "in our view there is no possibility that Iran would explode a nuclear test device."

When asked the system has been installed by America, the source clarified that the system has been set-up according to an international agreement and many countries besides USA have contributed to its installation. [sentence as published]

The foreign office source said that to operate the seismic system Pakistani experts were trained at Geneva. The source further said that a Pakistani organisation is supervising the operation of the system.



Meanwhile, a diplomatic source revealed that U.S. Secretary of State, William Perry, during his visit to India, told Indian authorities that such a system has been installed in Pakistan.

After the installation of the said seismic system, it is being apprehended that through this system nuclear programmes of Pakistan and those of other countries are being watched over and monitored. The installation of the said system, however, has clearly determined that Pakistan has joined CTBT.

### Editorial Opposes It

BK0902020795 Karachi NAWA-I-WAQT in Urdu  
8 Feb 95 p 10

[Editorial: "U.S. Nuclear Monitoring Center in Pakistan? What Does It Mean?"]

[FBIS Translated Text] According to a press report, Pakistan has allowed the United States to set up a seismological center in Pakistan by which the United States will actually monitor nuclear activities in the region, including Pakistan, India, Iran, and China et cetera. Although the U.S. defense secretary during his visit to Pakistan gave no indication of this, he confirmed it at a news conference during his stay in India. The center will be used to monitor nuclear activities. A letter in October 1994 written by the U.S. Administration to the speaker of the U.S. House of Representatives also mentioned it and said that the setting up of a G Sat-3 type station in Pakistan with the money from the \$10-million fund under the U.S. "Freedom Support Act," law—which was aimed at completing the mission of nuclear nonproliferation and disarmament—would greatly help in monitoring nuclear activities.

The United States is trying by every possible means to force Pakistan to sign the Nuclear Nonproliferation Treaty to eliminate Pakistan's nuclear deterrent program, which is vital for its security, existence, and protection. The United States has already succeeded in capping Pakistan's nuclear program, and now it wants to confirm whether Pakistan has actually capped it or not. It is unfortunate that our foreign minister himself proposed the nonintrusive inspection, thereby making the task easy for the United States. The existing inspection system is probably part of this process. [sentence as published] If Pakistan accepts either of these proposals, then it would mean that we will make ourselves helpless and deprive ourselves of the strength to protect our nation from Indian aggression, including a nuclear attack.

Pakistan's nuclear program does, in fact, provide a guarantee for maintenance of peace in the subcontinent. Because, when Pakistan did not have nuclear capability, India unhesitatingly carried out aggression against us in 1948, 1965, and 1971. However, when India carried out its nuclear explosion in 1974, in response, Pakistan started its own nuclear program, and with the passage of

time made progress in this sphere and acquired nuclear deterrent capability. Fearing this, India has not dared to carry out any naked aggression against Pakistan since 1971 despite all the disputes, the freedom movement in Kashmir, and the face-to-face confrontation at Siachen. It is not only the common impression, but has also been claimed by the armed forces and the government that they are the protectors of the nuclear program. Now it is their duty to protect the nuclear program from the hands of the United States.

Pakistan's nuclear deterrent capability is essential also because Pakistan is nowhere near comparable to India in terms of conventional weapons and troop strength. India possesses unlimited resources, and, in utilizing these resources, it has developed an armed force like a mini-superpower. India's Navy is capable of establishing its hegemony, stretching from the Indian Ocean to the Pacific Ocean. India's missiles are not only capable of hitting Pakistan, they are capable of reaching targets in Iran, China, Central Asia, and the Gulf, too. Given this situation, if Pakistan allows the United States the facility to monitor nuclear activities, then on the one hand it will restrict our own nuclear capability. On the other, Iran and China might justifiably be annoyed with the Pakistani action. The Indian HINDU newspaper also published the news about nuclear monitoring a month ago. However, the Government of Pakistan has not refuted it yet. It is also imperative upon the country's opposition to play its role, which it did not do effectively, in protecting the country's most vital interests like the nuclear program. In fact, a national consensus is necessary on this issue so no one gets a chance to make us weak in terms of defense.

It is possible that U.S. restrictions on Pakistan will be eased if it accepts the new system and the decayed [as published] F-16 planes will also be given to us during Ms. Bhutto's April visit to the United States, because, according to a report, Pakistani emblem has been engraved on them. However, by doing so, we will be compromising on our security and sovereignty because the nation views the nuclear program in this perspective. It will mean that we have bowed to the superpower. The doubts and misgivings the opposition has been expressing on Kashmir, the nuclear program, and the Gwadar port issue are true. Are we really trying to please the United States by accepting Indian hegemony?

### Spokesman Rejects 'Indian Propaganda'

BK0902151795 Islamabad PTV Television Network  
in English 1400 GMT 9 Feb 95

[FBIS Transcribed Text] Pakistan has dismissed Indian propaganda that a seismic detection station has been set up in Pakistan with American assistance to detect the nuclear test conducted by India. A Foreign Office spokesman said in Islamabad today that the station has been set up by Pakistan and is manned by Pakistani experts and will continue to be run in the same pattern. We can detect the nuclear test but it has not been

targeted against China or Iran as being propagated. The spokesman said the establishment of this station is according to the International Seismic Monitoring System which is supported by China and we hope Iran would also support it.

In reply to a question on NPT [Nuclear Nonproliferation Treaty], the spokesman said Pakistan is not satisfied with the treaty as it was discriminatory. There is no provision in it for the security of nonnuclear-weapon states against the nuclear threat.

[Begin spokesman recording]

**Spokesman:** The idea is that the whole world should be covered so that any seismic event—whether it is an earthquake or whether it is a man-made seismic event, it is a nuclear explosion, which can be detected, and thus the purpose. If the Comprehensive Test Ban Treaty comes into force, I see it probably in the near future, then it will be necessary to have this global network of seismic stations and this is (?where) we are cooperating.  
[end recording]

## REGIONAL AFFAIRS

### Meeting on CIS Military Cooperation

95UM0241C Kiev NARODNA ARMIYA in Ukrainian  
26 Jan 95 p 1

[News item from press service of the Ministry of Defense of Ukraine: "Questions of Cooperation Will Be Considered"]

[FBIS Translated Text] A working group of the staff for the coordination of military cooperation among the CIS member nations, headed by consultant to the secretariat of the Council of Ministers of Defense of the CIS Member Nations Colonel-General Herman Burutin, arrived in Kiev from Moscow on January 24.

Questions of the further cooperation of the Ministry of Defense of Ukraine with the staff coordinating the military cooperation were reviewed in the course of a working meeting with representatives of the Ukrainian military department.

## RUSSIA

### London Paper Reveals Extent of Soviet Nuclear Explosions

MS0802153095 London THE DAILY TELEGRAPH  
in English 8 Feb 95 p 16

[Report by Judith Perera, incorporating interview with Oleg Kedrovskiy, former USSR chief scientist, head of USSR PNE program; date and place not given: "Revealed: 23 Years of Soviet Nuking"]

[FBIS Transcribed Text] In September 1978 villagers in Yermakova, a small settlement inside the Russian Arctic circle, felt an earth tremor. Soon afterwards they noticed a black mushroom-shaped cloud hanging over the Yenisey river.

Four years earlier residents of Udachnyy in Yakutia (Siberia) were told to expect a tremor on October 3. The ground not only shook but also rose up before subsiding to form a huge crater. Many watched as helicopters hovered around a huge black mushroom cloud, which moved slowly north towards the Arctic port of Tiksa.

Both events were underground "peaceful" nuclear explosions (PNE's) which had gone wrong. Yegor Nikolayevich Timosov, Yakutia's environment minister, wants international help to tackle the consequences of 12 PNE's carried out in the republic during a 23-year period.

In all, 116 nuclear devices were exploded for industrial purposes between 1965 and 1988 as part of the Soviet Union's Programme No 7—Nuclear Explosions for the National Economy. Most of them were carried out in Russia (81) and Kazakhstan (30) as well as a few in Ukraine, Uzbekistan and Turkmenistan.

The Udachnyy explosion codenamed Crystal, was a quick, cheap way to make a dam. But the blast broke through the surface, sending up a radioactive plume. It was the same when a 20 kiloton device, Craton 3, was exploded 535 metres underground in August 1978, not far from Aikhal in Yakutia, as part of a geological research programme. The area was decontaminated but the site, now fenced off, still registers radiation at 3050 micro-Roentgens an hour, more than double normal background levels (12 micro-Roentgens per hour).

In 1990 Yakut officials began asking Moscow for details of the PNE's, but were assured that everything was in order. Not convinced, environmental groups did their own tests. Samples from the Crystal crater showed plutonium levels more than 35,000 times the norm. According to researcher Andrey Gedeonov, preliminary investigations in Yakutia by the St Petersburg Khlopin Radium Institute have since found severe contamination at four sites.

The Yakut government links this to high and rising levels of cancer, as well as to genetic damage revealed in some studies. Further research is under way and Yakutia has now been declared a nuclear-free zone.

Programme No 7 had 10 different ministries as its clients. The scientific head of the programme, Oleg Kedrovskiy, says PNEs were used for seismic and geological research, including mineral prospecting (39), boosting oil and gas production (22), creating underground gas stores (35), excavating reservoirs and dams (seven), plugging oil and gas "gushers" (five).

The first blast, in January 1965, created the Chagan reservoir in Kazakhstan inside the Semipalatinsk nuclear testing ground. Kedrovskiy says it was much cheaper to build the reservoir this way and insists that the water is not radioactive, although some contamination remains along the banks.

Several more blasts were scheduled to build reservoirs in Kazakhstan, but the programme was curtailed by the atmospheric test ban. "The radioactivity ejected into the atmosphere was not acceptable," he admits.

According to Nikolay Filonov at the Ministry of Atomic Power's Central Institute for Research, Development, Management, Economics and Information (Atominform), the 116 PNE's had a total yield of 1.5 million tons of TNT.

Both Kedrovskiy and Filonov agree that some explosions went wrong. These included a three-kiloton device exploded in September 1971 outside the town of Kinesha in Ivanovo. "The explosion's gaseous products spewed into the atmosphere and the ground was contaminated," Filonov says.

One of the world's largest deposits of apatite in the Kola peninsula in the Russian Arctic was ruined by two explosions, "Dneiper 1 and 2", conducted in 1972 and 1984, which were meant to make the ore easier to mine.

Instead, the kuelpor deposit in the Khibny Mountains was left highly radioactive. Radioactivity has begun leaching into ground water.

As for the other CIS republics, a team of geologists working for Kazakhstan's "ecology" programme has found surface layers of coal at a number of deposits highly contaminated with radionuclides and similar problems at 15 other deposits of rare-earth and non-ferrous minerals.

Oilfields in western Kazakhstan are also contaminated. Radioactivity in the seam waters of the oilfields exceeds permissible levels by several hundred times. The cause is not known for sure, but PNE's come high on the list.

Today, the sites of these industrial explosions fall into three different categories—closed, mothballed and operational. Around half of them are closed and drilling is prohibited within 300 metres of a capped well. These have been filled with concrete and local indicators register radiation levels at the surface. However, only gamma radiation is monitored, not beta or alpha emissions which are potentially much more harmful.

Those sites where work has finished but land has been contaminated are "mothballed" pending a clean-up. Some sites are still operating, including a number of oil rigs, underground gas condensate reservoirs and burial mounds for storing industrial wastes. At these gamma radiation is monitored constantly.

The use of PNE's to quench oil gushers has, on the whole, been a success. Their use to boost oil and gas production is also claimed as successful. For example, Kedrovskiy says, two or three blasts in the late Seventies at the Boutobinsk gas field in eastern Siberia increased yield 20 times and also made oil production possible.

According to Ernest Aleksandrovich Bakirov who supervised the oil and gas programme for 15 years, initial experiments increased the output of oil by 50 per cent and gas discharge tenfold. Moreover, the explosions increased output from other wells up to two kilometres away. He believes that shockwaves break down the oil molecules and reduce viscosity.

The explosion causes a pressure of more than a million atmospheres inside the well and temperatures reach over a million degrees centigrade. A cavity up to 30 metres across forms as the rock turns to gas. A network of tiny cracks appears which extends over 100 metres into the surrounding rock. Gas escapes through these until pressure is equalised.

Bakirov maintains that the technology is safe, provided it is used properly and the oil bed is isolated from water. He admits, however, that "if there is some water in it then it will absorb radioactivity and considerable purification will be needed."

At the Osinsky oilfield in Perm two nuclear blasts in 1969 made possible the recovery of an extra 300,000

tonnes of oil. However, the long-term cost is likely to be high. By 1978 radioactivity was being detected in nearby wells. By 1988 it had spread to 65, with radiation levels of up to 60 micro-Roentgens per hour. At some places where there have been oil spills it is as high as 3,000 micro-Roentgens per hour. Contamination is spreading to the Kama and Volga river systems.

Programme No 7 was suspended in 1988 when Moscow announced a moratorium on all nuclear explosions. Nine projects were unrealised, including two for the burial of nuclear and chemical wastes. A project to use PNE's for toxic waste disposal was revived two years ago by Arzamas-16—one of Russia's "secret" cities. A demonstration was planned at the Novaya Zemlya nuclear weapons test site but so far the government has refused to allow this.

Kedrovskiy still believes PNE's are a viable technology. "But today," he admits "it would require new, clean devices, because we must avoid the mistakes of the past."

#### Missile Center Designer on Industry Development

95UM0228A Moscow *SEGODNYA* in Russian  
25 Jan 95 p 9

[Article by "Nekos" Agency Correspondent Vladimir Gubarev, under the rubric: "Experts": "Opinions: General Designer Igor Velichko: 'We Are Looking for New Paths Into Space'"]

[FBIS Translated Text] Since time immemorial, Miass has been considered to be the "golden city" of the Urals. Here each resident knew how to pan for gold and working people from every corner of the country congregated here in hopes of striking it rich... Illusions have been destroyed by reality and yet Miass has always remained with gold. And today a dredge operates on the outskirts of the city and they point it out to guests with pride.

The 20th Century has brought new glory to Miass. First of all "Ural" all-terrain motor vehicles and now missiles. The curtain of secrecy has been opened slightly and we have learned that the State Missile Center imeni Academician V.P. Makeyev is located here where powerful missile systems are developed for nuclear submarines.

Gubarev: The unknown missile center—that's what they call you. Was there a need for such "deep" secrecy?

Velichko: We weren't involved with space but it was space that brought us fame. Our mission was to develop military systems and, if you approach the problem of secrecy from that point of view, then secrecy is justified. And believe me, right now it is urgent. No matter how much you talk about disarmament, glasnost, or permissiveness, nevertheless state secrets exist and there are quite a few of them within the walls of our state center. The confrontation between the United States and the



USSR in the sphere of strategic offensive weapons began immediately after the development of nuclear weapons, both on land and at sea. Responsibility for the development of missile systems for submarines lay on the shoulders of the design bureau headed by Viktor Petrovich Makeyev. And the fact that the collective managed to not only maintain the balance but at times to even outstrip similar U.S. weapons in some parameters certainly was an outstanding contribution of Academician Makeyev and his comrades in arms and subcontractors who worked together with the "Machine Building Design Bureau," as our State Missile Center was previously called.

**Gubarev:** This sphere of missile building was always "terra incognita." Could you briefly discuss the primary stages of its development?

**Velichko:** In 1954, research began of the methods to employ ballistic missiles from submarines. In the United States, this was the Jupiter missile and in the USSR the R-11 operational-tactical missile. Academician Sergey Pavlovich Korolev, who "transferred" this direction to his Student Victor Petrovich Makeyev, was at the origin of this work. He headed the design bureau in the Urals in 1955. It is at this time that the submarine missile development strategy was determined. Because the Americans had not managed to solve a series of problems with the "liquid" variant, they rejected the Jupiter and shifted to the Polaris program which utilized solid fuel. In our country, progress in liquid missile engines was more substantial. The first launch of the R-11 FM ballistic missile from a submarine occurred on September 16, 1955.

We have proposed a 'space interceptor' project to the world community. If the idea is supported, we are prepared to begin its implementation so that we can completely protect our planet from random occurrences already at the beginning of the 21st Century.

**Gubarev:** And the competition between the USSR and the United States began?

**Velichko:** The Cold War was going on and it determined many things. Our first generation naval missile systems lagged behind American systems. This was associated with the general lag of missiles and the economy as a whole. We also lagged behind in firing range, the basic load of ammunition on a submarine, navigation and firing accuracy. Already by 1964, 18 submarines were operating in the United States and they made up the foundation of the U.S. strategic forces... With the development of the second generation, we managed to eliminate the gap and lag, although both sides had their specific features. Specifically, we had at our disposal missile systems with intercontinental firing range and a single warhead and the United States had medium range missiles with a MIRVed warhead. It is very often asserted that we "built up the might of submarines faster than the Americans". That is incorrect. It is sufficient to cite these figures. In 1960, the United States had 48

missile systems and just as many warheads on them and we had a total of 15. Ten years later—656 nuclear warheads and 300, respectively. In 1990, the U.S. nuclear submarine fleet had 5,440 warheads in the inventory and we had 2,761. I think that from here it is easy to arrive at the conclusion about who led in the arms race... The development of third generation missile systems began at the beginning of the 1970's. Both the USSR and the United States made a "technological breakthrough" in this sphere and the results obtained were comparable. Therefore, a strategic balance was established between our countries and now it is a question of strengthening strategic stability. All of the problems associated with the development of Russia's submarine-launched ballistic missiles were resolved under the leadership of Academician Makeyev. Our center was the leader in that direction.

**Gubarev:** I know that Viktor Petrovich won several "battles" with the country's highest leadership while defending its direction?

**Velichko:** He was not only a brilliant organizer and designer but he was a staunch, persistent man. Along with his colleagues, he defined the main goal and then as Chief Designer defended the overall decision. This didn't always succeed but quite often Makeyev knew how to convince both his opponents and the highest leadership. In his memoirs, he relates a curious episode associated with a Defense Council session in 1964. This is how Viktor Petrovich described it: "For us, this year was historic, having caused quite a few trials and tribulations. In that year, just like in 1959, we once again had to take our chances. Quite unexpectedly for us, another design bureau—TsKBM [Maritime Central Design Bureau] (Chief Designer V.N. Chelomey) developed proposals, besides our technical proposals, for the new development of the complex. This was a very powerful design bureau with outstanding experimental facilities. The question, to whom, in the final analysis, to entrust this development, was decided at a responsible session under Chairman N.S. Khrushchev. V.N. Chelomey was the first to deliver a report. It turned out in such a way that the issue was essentially predetermined and my report already did not make sense. Nevertheless, the report was delivered and, to general surprise, N.S. Khrushchev said that he much preferred KBM's proposals. This also determined the principal developer. We once again became the principal developer. The decree on the development of the systems was adopted in 1964. Krasnoyarsk Machine Building Plant was determined to be the principal plant. V.P. Kotelnikov was designated director of the plant. Only God and we know how much effort and health went into the development of this system. Already in the village of Nenoksa where the Northern Naval Test Range was located and where Makeyev arrived, he said that after the reports Khrushchev added: "Chelomey's proposals are good but I prefer Makeyev. See how the pioneer has grown!" The fact is that still prior to the war when Khrushchev was first secretary of the Moscow Party City Committee, he

arrived at the aircraft plant in Filyakh. During a triumphal meeting, then Vitya Makeyev tied a pioneer's tie on him. Nikita Sergeyevich had fond memories of that... It is curious that Stalin also unintentionally played a definite role in Makeyev's fate. Viktor Petrovich worked at the Komsomol central committee and was a member of the delegation at the Olympiad in Helsinki. After our soccer team's loss, Stalin ordered everyone who led the delegation be fired. Makeyev then left the Komsomol and was no longer involved in public activity. He returned to "Korolev's firm". Without Stalin's order, Viktor Petrovich's fate could have turned out differently...

**Gubarev:** Did they sometimes call Makeyev a "lucky person" and did they say that your design bureau was very lucky?

**Velichko:** Viktor Petrovich sometimes quoted Korolev who said: "If you make things rapidly but poorly, everyone will soon forget that you made things rapidly but they will long remember that you made things poorly." And that is why the collective did not have the right to work like that. Bear in mind that Makeyev was surrounded by very talented scientists and designers, especially in the Urals region. The fact that the systems developed here did not lag behind American systems became possible largely thanks to the productive cooperation of two centers—missile and nuclear that are located side by side. I have in mind Miass and Chelyabinsk-70. And also the wonderful contacts between Urals Academicians Yevgeniy Ivanovich Zababakhin and Viktor Petrovich Makeyev who were unknown in broad circles. Of course, cooperation continues between their scientists and comrades in arms... So, before we talk about "luck", we need to recall the difficult work, the searches, the failures and the new searches.

**Gubarev:** And yet, did Makeyev sometimes lose? I have in mind the story about the development of solid fuel missiles?

**Velichko:** "Failure"—That isn't the word! In the final analysis, these systems were developed and the State Center imeni Academician Makeyev was once again the principal organization. The essence is something else. Viktor Petrovich was convinced that there was no need to develop these systems. He thought that enormous resources would be required to deploy a new sphere of industry and to create enterprises, test stands and so forth. And that's what happened. They jokingly said that we are faced with a "hard political line". This decision was made "at the very top" and it was thought that if the Americans had solid fuel missiles then we had to have them. Makeyev was convinced: "We will lose much time and resources for no reason. The advantage from it in combat utilization will be ephemeral. The country's political leadership needs the system to deter the probable enemy and here arguments and calculations are futile."

**Gubarev:** And yet he agreed?

**Velichko:** There was no other solution. This was an order. Of course, they could have tasked another design bureau to

develop the missile systems but "Makeyev's firm" carried out this project with the least expenditures and with greater effectiveness... So, today when some people talk about the "insatiability of the defense industry," they are profoundly deceived: sober and realistically thinking people who took the country's capabilities into account always worked in the military-industrial complex, in contrast to many political leaders. This is not a vote of approval but the facts. I know very well that our neighbors—the nuclear weapons people—very often opposed the expansion of the products list of their "items" but, unfortunately that opinion was often not heeded. In the end, the appropriate order or government instruction was issued and they carried it out as state people. The missile builders also did.

**Gubarev:** We have reached conversion... This is a logical continuation of the conversation, isn't it?

**Velichko:** There are enough errors and primitivism with conversion... It is quite natural that they also affected the State Missile Center. We are the primary developer of equipment to produce children's food. We have designed systems to produce canned goods, pate and sausages in a long-term storage sleeve. We are developing equipment to process agricultural raw materials for farms and the food industry, food packaging, and loading and unloading operations. Our State Center is designing the "Spektr" tram car that should replace Czech cars. We are also developing various medical equipment—bathing equipment, diagnostic and physical therapy devices and other equipment.

**Gubarev:** The list is impressive but why isn't there optimism?

**Velichko:** That type of "conversion" is probably necessary but it cannot provide the State Missile Center and its collective with the needed devices and, the main thing, with creative work in that sphere where we occupy the leading position. I think that it's clear to everyone that Russia needs a submarine fleet that is equipped with modern missile systems. But then why are resources for defense work being allocated so irregularly? There's no use hiding it. The chief designer has to go to Moscow not to discuss weapons problems at the Kremlin, the White House or Ministry of Defense but to dislodge money for salaries... And we need another conversion, that which will raise the country to a new level and we can be monopolists on the world market and earn an enormous income. Of course, assistance is needed and, not resources, but the Russian leadership's interest in this type of conversion.

**Gubarev:** Examples, please?

**Velichko:** The Makeyev Design Bureau was not previously involved with space. It's possible that this is one of the mistakes of the past. We will not judge... But we did not direct attention to the possibility of utilizing military missile technologies for peaceful purposes. There are the "Zyb" and "Volna" launch vehicles. After minor reequipping, they can be utilized for the vertical launch of special rescue units. Micro gravity conditions are created in 17-30 minutes. This is entirely adequate to

obtain certain materials under conditions of weightlessness and to purify certain medicines.

**Gubarev:** Three launches of the "Zyb" rocket have taken place from a submarine—as experiments on materials technology and biotechnology. The results that were obtained are quite interesting and they permit us to talk about commerce. We are prepared to place a series of "Volna" rockets on the market that will permit the increase of the time of experiments in space. Isn't this conversion?

**Velichko:** But are there more "exotic" projects?

**Gubarev:** Certainly. Do you have in mind "Aerokosmos" and "Priboy"? These projects are real and are implementable already in the near future. This is a question of mobile launch platforms for which cosmodromes are not needed. You can launch objects into space from any point of the World Ocean or from an aircraft. The cost of these launches into space is significantly cheaper than customary launches. Incidentally, the idea of "maritime" launches into space was born in the United States, however, they could not implement it there. But it became a reality at Miass—this fact already attests to the capabilities of the State Missile Center Imeni V.P. Makeyev.

**Velichko:** And what do you have in the future?

**Gubarev:** We have in reserve another series of original projects that are based on the technologies of submarine missile systems. Perhaps I will mention one more thing—about the defense of the Earth from dangerous space objects—comets and asteroids. The danger of a collision between them and the Earth is high and right now there are real possibilities to avoid that. We have proposed a "space interceptor" project to the world community. If the idea is supported, we are prepared to begin its implementation so that we can completely protect our planet from random occurrences already at the beginning of the 21st Century.

**Velichko:** Do I sense that you look to the future with optimism?

**Gubarev:** Over the decades, the Makeyev Design Bureau collective has overcome enormous difficulties and has done this successfully. Indeed, previously they were of a technical nature, right now they are different... But science has always lived with hope and confidence in the future. Just like those people who are involved with that. Our confidence is in common sense.

**Novohuyvynskyy Tank Plant To Produce Pipelayers**  
95UM0241E Kiev NARODNA ARMIYA in Ukrainian  
3 Jan 95 p 1

[Unattributed news item from Zhytomyr: "Pipelayers Instead of Tanks"]

[FBIS Translated Text] The retrofitting of production for the output of "civilian" products is being pursued successfully by the workforce at the Novohuyvynskyy Tank Repair Plant in the Zhytomyr area. The output of

consumer goods and items of close to 50 types in the machine-building field has already been set up in the shops that have been freed from the filling of military orders. Sets of process equipment for brickyards, stone-cutting tools, pipelayers, machine tools for the processing of hides etc. all enjoy demand. One of the wings of the repair plant has been set aside for the refitting of freight trucks, to equip them with diesel engines.

The "requalification" of the military plant has had virtually no impact on the economic indicators of the workforce—they are working as profitably as before. The enterprise maintains a workers' village and subsidiary farming and is building housing, all with its own funds.

The Zhytomyr Elektrovymiryuvach Production Association, the Korostenskyy Road Machinery Building Plant, the Korostyshivskyy Electroprylad Plant and a number of other enterprises are also implementing conversion successfully.

#### Uranium Industry's Status, Prospects Eyed

MM0302085395 Moscow Russian Television Network  
in Russian 0936 GMT 24 Jan 95

[From the "World Market" program broadcast under the "Delovaya Rossiya" rubric: Video report on uranium enrichment industry by Zhanna Agalakova, identified by caption; figures in brackets denote broadcast time in GMT in hours, minutes, and seconds]

[FBIS Translated Excerpt] [093649 thru 093733—passage omitted—presenter mentions previous program devoted to situation in the world uranium market (see ref) and says that today's program will be devoted to the uranium enrichment industry; generalities about uranium enrichment over library footage of explosion of missiles subject to reduction, periodic table, unidentified power station in middle distance]

[093734] [Agalakova over video of uranium enrichment plant]

**Agalakova:** One kilogram of uranium ore costs approximately \$15 to \$17 on the world market, while one kilogram of nuclear fuel fetches ten times more. The cost of enrichment constitutes 40-45 percent of the nuclear fuel price. In some countries this indicator is much higher. In Russia it is very low. This is because our uranium enrichment technology is the most accomplished in the world. Hence the fuel obtained at Russian enrichment enterprises is cheaper. This is why many foreign companies engaged in uranium mining prefer to have their raw material processed in Russia. This is what is called "uranium enrichment services." [093804]

[093805 thru 093832—passage omitted—review of the history of Russian uranium enrichment services since the early seventies over footage of foreign nuclear installations captioned "Greenpeace"]



[093833] [Aleksey Grigoryev, director of "Tekhsnabek-sport" Joint-Stock Association's "Uranservis" Company, identified by caption]

**Aleksey Grigoryev:** Shipments of uranium to the United States began in 1987, to South Korea in 1990, and since 1993 we have been supplying enriched uranium to South Africa. Thus the geographical area of our exports has been expanded. At the moment countries in the Far East look very interesting and promising. As I said earlier, we supply South Korea. If relations with Taiwan are normalized, we hope to supply our product to Taiwan, which has a developed nuclear power industry. The Japanese market also holds great promise.... [093918]

[093919 thru 094000—passage omitted—remarks by Viktor Mikhaylov, Russian atomic energy minister, to the effect that sales to Japan are a very tricky question because of the close trade relations between Japan and the United States which controls 80 percent of the Japanese market]

[094001] [Agalakova over video of unspecified control room, footage of missiles being dismantled, Chelyabinsk-65's RT-1 nuclear fuel reprocessing plant exterior, various pipes disgoring effluent, radiation warning sign]

**Agalakova:** The potential of Russian uranium enrichment enterprises is so great that we could meet 25 percent of the world's requirement. Meanwhile, our share of the world market totals only 6-7 percent. The market is dominated by the United States which accounts for approximately 50 percent of world exports of low-grade uranium used by nuclear power stations. This is all the more annoying for our nuclear industry workers since the Russian nuclear complex is much more powerful and modern than the U.S. complex.

Signed peace agreements have raised the problem of converting highly enriched uranium contained in nuclear weapons into low-grade uranium. Let me reiterate, it is the low-grade uranium used as fuel at nuclear power stations which is the subject of world trade. Last year an agreement was signed with the United States on converting 500 tonnes of weapon-grade uranium into fuel for nuclear power stations at Russian plants and then shipping it across the Atlantic. The contract spans 20 years and will bring Russia around \$12 billion. Shipments under this contract are to begin this year.

In addition to this, Russia has pledged to deliver 100 tonnes of nuclear fuel obtained from dismantled warheads to Ukraine. This hi-tech conversion process is carried out at the RT-1 plant in Chelyabinsk-65. Apart from weapon-grade uranium, the plant also processes spent nuclear fuel from nuclear power stations which can be reused in nuclear reactors after recycling. In 1994 the plant processed 202 tonnes of nuclear fuel. This is almost twice the amount processed during the previous year. Spent fuel is brought to the plant not just from Russian nuclear power stations, but also from Ukrainian, Hungarian, Finnish, and Slovenian plants. Revenue for services rendered to

foreign partners constitutes the main source of income of this enterprise since Russian enterprises are not very solvent. However, the processing of spent nuclear fuel is being protested by environmentalists and the public. [094136]

[094137 thru 094232—passage omitted—Greenpeace activist D. Litvinov says Russia is being turned into a nuclear dump, Atomic Energy Minister Viktor Mikhaylov denies this]

[094233] [Agalakova over more footage of Chelyabinsk-65 plant]

**Agalakova:** In 1994 uranium exports totaled \$1.25 billion, having increased by 20 percent in comparison with 1993. It is planned that by the turn of the century it will total \$3 billion. Our nuclear industry does not lack potential.

[Agalakova to camera]

**Agalakova:** The nuclear power industry is going through difficult times. Without exporting its output and services this once-powerful sector cannot survive today. [094255] [video shows extensive footage of uranium enrichment plant; missiles being dismantled, sweeping shots of Chelyabinsk-65's RT-1 plant exterior, effluent pipes]

#### **Agency Denies Radioactive Substances Stored in Bryansk**

*LD2901175695 Moscow Radiostantsiya Ekho Moskvy in Russian 1600 GMT 29 Jan 95*

[FBIS Translated Text] The Lithuanian customs detained a cargo of radioactive material on the border with Belarus last night. We have asked Georgiy Kaurov, head of the Information Department of Russia's Atomic Agency, to comment on the incident.

[Begin Kaurov recording]

**Kaurov:** If the cargo of tungsten were to contain radioactive tungsten isotopes, its radioactivity would have been higher than 3,600 microroentgen an hour. The cargo of tungsten probably came into contact with some kind of radioactive substance. Bryansk region is still contaminated after the Chernobyl accident. The Russian Atomic Agency has no warehouses or any other kinds of storehouses of radioactive substances in Bryansk region. We have no sites there that deal with radioactive substances. [end recording]

#### **Sweden Allocates 2.6 Million Krona for Elimination of CW**

*LD2901222395 Moscow Voice of Russia World Service in Russian 2010 GMT 29 Jan 95*

[FBIS Translated Text] The Swedish Government has allocated 2.6 million krona for a program to help Russia eliminate stockpiles of chemical weapons. The announcement was made in a press release made by the



Swedish Foreign Ministry in Stockholm. The money will partly go toward eliminating chemical weapons [CW] in Kambarka, Udmurtia.

**Topol-M Development Does Not Pursue Military Superiority**

MM2501094395 Moscow KRASNAYA ZVEZDA  
in Russian 25 Jan 95 p 3

[Gennadiy Khromov "Expert's Opinion": "What Ill-Considered Claims Lead To"]

[FBIS Translated Text] As is well known, Russian military policy is based on the tenet of nuclear deterrence. Deterrence rather than a desire to outflank anyone, overtake anyone, achieve military superiority, or ensure a nuclear first-strike capability. On the basis of these doctrinal provisions, our country, on the one hand, by retaining its grouping of strategic nuclear forces, and, on the other, by working out the appropriate international agreements in the arms control sphere, seeks to ensure conditions which would make it possible to deter a potential aggressor. And the United States too, it seems, holds similar views and modes of behavior regarding nuclear deterrence.

This makes it all the more baffling as to why certain organs of the Russian press constantly carry articles which mention, seemingly en passant, the idea that Russia wants to "overtake America" in the sphere of nuclear missile weapons. Articles of this kind can only provoke the other side to take retaliatory measures, which runs counter to the growing partnership between Moscow and Washington.

Quite apart from technical blunders and distortions of the essence of the START Treaty, some quite absurd ideas are encountered. For instance, the idea that, by developing the silo-based Topol-M missile, Russia will allegedly "shut down" Ukraine's missile industry. After all, production of combat strategic missiles there has already been "shut down" in line with international agreements—the Non-Proliferation Treaty, which Ukraine joined as a nonnuclear state.

Of course, any new development in the sphere of missile weapons, even if it is an enforced measure (and the development of the Topol-M missile, in particular, was just such an enforced measure inasmuch as the START II Treaty permits only single-warhead missiles and we currently have no single-warhead silo-based missiles), is pursued with consideration for all previous experience, including foreign experience. Consequently, it is quite natural that missiles better than those previously developed in the seventies and eighties are appearing. But this is a consequence of scientific and technical progress, by no means of a desire to overtake somebody at all costs.

**U.S. Offers Aid for Safeguarding Uranium, Plutonium**

MM3001144795 Moscow KOMSOMOLSKAYA  
PRAVDA in Russian 28 Jan 95 p 3

[Report by Sergey Ivanov: "Uranium in Greenback Cage"]

[FBIS Translated Text] New York—The fact that Russia has been provided with voluntary assistance by the United States to the tune of \$20 million became known the day that the Fourth Session of the Preparatory Committee of the Nuclear Nonproliferation Conference began its work. The Pentagon thinks that the money should be used to ensure the safekeeping of weapons-grade uranium and plutonium. Technically it has been advised to use this money to fit super-sensitive sensors and other equipment needed for the protection of the particularly important installations storing the raw materials for Russia's nuclear weapons.

In all the U.S. Defense Department has already given the former USSR's three nuclear powers around \$900 million for similar antinuclear purposes.

**Problems of CBW Destruction Discussed**

MM3101135595 Moscow Ostankino Television First  
Channel Network in Russian 0700 GMT 22 Jan 94

[From the "Test Range" program: Report over video of Kizner and Kambarka chemical weapons facilities in Udmurtia; figures in brackets denote broadcast time in GMT in hours, minutes, and seconds]

[FBIS Translated Excerpt] [072425 thru 072548—passage omitted—unidentified correspondent philosophizing on wisdom of siting chemical weapons in Udmurtia, famous for its clear springs, over footage of spring in the forest followed by shots of two men in gas masks and protective suits opening door to chemical shell storage facility]

[072549] [G.G. Frizorger, chief specialist of the Udmurt Republic's Committee for Conventional Weapons Problems, identified by caption, speaking to camera against backdrop of aforementioned chemical shell storage facility, followed by footage of interior of facility, closeup of chemical shell, another view of facility's exterior]

G.G. Frizorger: This is one of the storage facilities of the Kizner Arsenal. The Kizner Arsenal differs from the Kambarka Arsenal in that the Kambarka Arsenal, as you know, is used to store lewisite in tanks with a capacity of up to 50 cubic meters. Here, at the Kizner Arsenal, mainly artillery shells designed for use in combat conditions are stored. They contain toxins belonging to the category of neuroparalytic chemical agents. The lethal dose of these gases in the air ranges between 0.04 and 0.05 milligrams per liter. For this reason the service personnel of the base checks instruments and carries out visual inspections of the said munitions virtually every day.

[Report captioned "Vladimir Dynin, Nikolay Anosov, Vladimir Volzhanin, Yevgeniy Kazantsev" over video of U.S. delegation arriving in Kambarka by helicopter, conference, some footage of lewisite storage facility] At the end of August a group of U.S. chemical weapons specialists arrived at this military facility. The two-day visit was necessary to verify information submitted by the Soviet Union [as heard] on the storage of toxic agents in tanks. Earlier our delegation had visited a similar U.S. facility. Incidentally, there it became clear that our partners at the negotiating table had as many problems with the destruction of these lethal weapons as we have. The construction of a plant to destroy these weapons on an atoll in the Pacific, and the plan to build eight plants on the territory of the United States are being actively criticized by environmental organizations as unsafe. Therefore there is clearly no point in readily agreeing to the use of U.S. technology for destroying toxic agents, especially since the United States would bear no responsibility.

[Nikolay Anosov over video of factory gate, river terminal, countryside at Kambarka]

**Nikolay Anosov:** The "reds," "greens," and "blues" are trying to frighten each other, and us into the bargain. All this looks like a political game in which you and I are not taking part. The real danger, however, affects precisely us. Politicians believe that they are immortal.

[Vladimir Volzhanin over video of lewisite storage facility]

**Vladimir Volzhanin:** Lewisite is a toxic blister agent. Its basis is arsenic—a colorless liquid with a typical smell reminiscent of geranium. It was first used toward the end of World War I. At the Kambarka facility it is being stored in 60-tonne tanks.

[Stanislav Petrov, chief of the Russian Defense Ministry Directorate for Radiation, Chemical, and Biological Protection, identified by caption]

**Stanislav Petrov:** Lewisite has been stored here for 40 years. During this period there has not been a single leak. One of the guarantees that such a leak cannot occur by natural processes is the fact that in 40 years the thickness of the walls of the tanks in which the lewisite is stored has decreased only from 10 mm to between 9.4 and 9.6 mm.

[Yevgeniy Kazantsev over video of delegation visiting storage facility]

**Yevgeniy Kazantsev:** Despite these very safe storage conditions, lewisite is destined to disappear from the face of the Earth under the Soviet-U.S. agreement on the destruction of chemical weapons, dated 1 June this year [as heard]. The veil of secrecy has been lifted from chemical weapons, so journalists have been allowed to visit the facility.

Unfortunately, the question of the method of destruction to be used remains on the agenda. In our country there are currently six such methods. One of them makes

provision for the recycling of the toxic agent to obtain high-purity arsenic for which there is great demand on the world market. Prominent scientists and military chemists are involved in working out a program for the destruction of chemical weapons of which there are between 40,000 and 50,000 tonnes in our country. [072953]

[072954 thru 073050—passage omitted—unidentified correspondent philosophizing about the future of the Earth over video of spring in the forest and shots of mountains]

### **Commission Demands Government Secure Chemical Weapons**

*LD2401215895 Moscow INTERFAX in English  
1934 GMT 24 Jan 95*

[FBIS Transcribed Text] Moscow, Jan 24 (INTERFAX)—The Russian National Security Council's Interdepartmental Ecological Security Commission demanded Tuesday that the government should step up security in production, storage and destruction of chemical weapons.

A commission decision called for a legal framework for elimination of the consequences of earlier tests and destruction of chemical waste and for making a list of potentially dangerous dumping grounds of earlier years.

Colonel-General Stanislav Petrov said that the stock of chemical waste amounted to nearly 40,000 tonnes in Russia. He argued that most storages of chemical weapons posed no ecological danger but the storages of a certain kind of chemical poison built in the 1950s needed an overhaul.

Petrov emphasized that as little as 25% of the funds needed to destroy chemical weapons in 1994 had been made available. The financing planned for this activity in 1995 covered just half of the needs.

Chairman of the Interdepartmental Commission Aleksey Yablokov, a member of the Russian Academy of Sciences, told Interfax that the annual increases of the incidence of diseases were largely attributable to environment pollution everywhere, in particular in Moscow. "Once 60 especially dirty spots where large amounts of experimental waste have been buried are dealt with, 50 new ones emerge the next year," he said.

### **Foreign Ministry Rejects Reports on Nuclear Center**

*LD2401185295 Moscow INTERFAX in English  
1731 GMT 24 Jan 95*

[From the "Diplomatic Panorama" feature]

[FBIS Transcribed Text] A Russian Foreign Ministry spokesman, Grigoriy Karasin, has described as "untrue" the Western media's reports on the lack of a system for accounting nuclear materials, strict confidentiality, etc. in the Kurchatov Institute in Moscow.

Karasin remarked that "both in Russia and the West the control of and ensuring physical security of nuclear materials is very pressing." "We do not deny that after the break-up of the former Soviet Union there is no more a centralized system for ensuring safe storage of such materials, reports on their thefts appeared," he added.

However, "the existing Russian systems for security of nuclear installations are no less effective than their foreign equivalents and guarantee the prevention of nuclear thefts," he stated. "Despite periodically appearing versions, nothing has been documentarily proved on the contrary," he emphasized.

"Russia is interested in wide international cooperation in ensuring the security of nuclear materials and installations. This is why the Kurchatov Institute and the U.S. national laboratory Sandia agreed to design and introduce a modern security system to meet the requirements of today," Karasin said.

#### **U.S. Senate Attempt To Revise START May Damage Moscow Ties**

*MK0402104095 Moscow KOMMERSANT-DAILY in Russian 4 Feb 95 pp 1, 4*

[Report by Aleksandr Koretskiy under the "Hearings on START II in U.S. Senate" rubric: "Sometimes It Is More Difficult To Ratify a Treaty Than To Sign It"]

[FBIS Translated Excerpt] The U.S. Senate Foreign Affairs Committee has been holding hearings on the START II treaty these days. It is well known that this procedure precedes the treaty's ratification. By preliminary expert estimates, the debate will last for about a month. Only then will the Senate's final opinion on the agreement become known. The very first assessments that have set the tone for further discussion prove, however, that START II is in for a bumpy road not only in the State Duma. It cannot be ruled out that the treaty—as has already been the case with U.S.-USSR treaties—will fall victim to a domestic political struggle in America. But however paradoxical it might seem, even a favorable outcome of the hearings will entail foreign policy headaches for the Clinton administration.

START II could emerge only in the atmosphere of euphoria that reigned in Russian-U.S. relations at the very beginning of the 1990's. Considerations of pure expediency also played not the least part in the extremely hasty drafting and signing of the treaty. George Bush, who lost the White House to Bill Clinton just two months before START II was signed, was not averse to putting a spectacular period in the history of his presidency. As for the "young Russian democracy," it needed a large foreign policy success like a breath of air. Not only to underscore its nuclear status, but also for domestic political reasons: the president's struggle with the Supreme Soviet had already entered the stage of Cold War. For this reason an extra trump card to pressure "the anti-reformist Supreme Soviet" was far from unnecessary. [passage omitted]

On one hand, the ratification of START II in the United States might be an irritant for Moscow, which has neither the money to implement the treaty nor the assurance that it will be ratified by the State Duma. On the other hand, it may play an extremely positive role in buttressing Boris Yeltsin's shattered image (if he finally succeeds in convincing the State Duma to ratify START II).

Still, in the United States, too, certain problems may crop up with regard to its ratification. At any rate, the hearings on the treaty began with harsh criticism. For instance, Jesse Helms, chairman of the Foreign Affairs Committee, said bluntly that he doubts the need to cut U.S. strategic forces as drastically as the START II treaty envisions. In his view, the treaty considerably reduces the potential of deterrence and, hence, increases the likelihood of aggression against the United States. Not only by unpredictable Russia, but also by China and "other potential nuclear adversaries." The senator particularly singled out Russia, however, admitting he has "no confidence that the Russians could be trusted to adhere to treaty provisions." Moreover, events in Chechnya "have raised questions about the future of reform in Russia." Hence, about its commitment to international agreements.

Such statements by a committee chairman indicate that Helms and other Republicans will not change their attitude to the treaty in the near future. But nor are they likely to bury it—such a step would be unwarranted from the point of view of both domestic and foreign policy. Yet START II could become the most powerful leverage for Congress to pressure the U.S. President. For this reason "minor amendments" to the treaty cannot be ruled out (this might well be done in Senate, but subsequently a new procedure of renegotiating and signing the document will be required).

The possible Senate amendments are highly likely to call for a linkage to political problems that have no bearing on arms cuts. In this case a blow would be dealt not only to the United States' partnership with Russia in general and the State Duma's pride in particular, but also to the personal prestige of Bill Clinton, who will have to straighten this entire mess out.

#### **Commentary Questions Who in U.S. Wants To Halt Disarmament**

*LD0602203995 Moscow Voice of Russia World Service in English 1810 GMT 6 Feb 95*

[FBIS Transcribed Text] The House of Representatives Foreign Relations Committee in the U.S. Congress has passed the national security revitalization act introduced by the Republicans. Details from Vladislav Kozyakov and here is what he writes.

The 'NEW YORK TIMES' in its editorial describes this act as nostalgia for the Cold War. It says the bill being pushed through by the Republican majority in the congress may frustrate the awkward attempts by the Clinton



team to tailor the national security to the post-Cold War realities. To substantiate their viewpoint, the authors of the article bring forward a number of arguments. For one, they claim the bill will result in mounting pressure for raising military expenditures, spreading NATO defense guarantees to eastern Europe and reducing the United States share in the UN peacekeeping operations. Among these and other clauses of the act is a proposal to renew efforts to build what it calls an antimissile space system, better known as the Star Wars program.

The version approved last week by the House of Representatives Foreign Relations Committee underlines the need to unroll a reliable defense system capable of protecting the United States against ballistic missiles. Such an approach may bring about a serious setback, both in the Moscow-Washington relations and global security.

Pushing towards the creation of an antiballistic missile system would be an encroachment on the ABM [antiballistic missile] treaty signed by the United States and Russia in 1972 which prohibits the building of space or large-scale missile defense systems. It paved the way for agreements on the limitation and later the reduction of strategic nuclear arms.

Who in the United States can be interested in halting or reverting the process of nuclear disarmament?

The question becomes even more actual given other statements from Washington. Starting from 1993 Russian-American negotiators in Geneva have been trying to determine the concept of strategic and tactical antimissile defense. This is a long standing problem. The point is to maintain the ABM treaty along with setting up defense systems to counter tactical missiles.

With the next round of talks scheduled for March, the U.S. Administration plans to conduct tests already this month, but the aim of the tests is yet to be confirmed. Meanwhile, 22 senators, including the leader of the Republican faction in the Senate, have sent a letter to President Bill Clinton urging him to break off consultations with Russia.

At the September Vancouver summit the Russian-American sides unanimously agreed that the ABM treaty should remain viable and intact, but there have been reports over recently about unpredictable statements and decisions being made in Washington that may affect global security.

#### **Proposal To Use START-Limited ICBM's Against Asteroids**

95WC0018A Moscow KRASNAYA ZVEZDA  
in Russian 28 Jan 95 p 6

[Article by Colonel Anatoliy Bondarenko, candidate of technical sciences and Academy of Military Sciences professor, and Colonel Nikolay Turko, doctor of military sciences and Academy of Military Sciences vice president, under the rubric: "21st Century Projects: Nuclear

Warheads Against Asteroids: Do We Need to Destroy the New Radar Site at Skrunda"]

[FBIS Translated Text] The collision of fragments of the Schumacher-Levy Comet with Jupiter in July 1994 demonstrated that the space threat to the existence of human civilization is not so unrealistic. According to scientists' data, approximately 65 million years ago Earth had already survived such a collision, as a result of which the form of life on our planet drastically changed. We foresee the indignation of some readers. What are you talking about? Here you could last for a day and live for a month or a year. But still let's study the future—underestimating the threat from space would be unpardonable shortsightedness from the point of view of the global vital interests of mankind.

Scientists have already suggested various ways to resolve this global problem: from the idea of using nuclear warheads to affect an asteroid whose encounter with Earth is unavoidable, to the idea of dispersing people to other planets. Considering the latter to be a question of the very remote future, let's briefly analyze the possibility of realizing the employment of nuclear warheads.

In order to prevent an asteroid from colliding with Earth, it's first of all necessary to detect it and to assess the degree of danger of an encounter with our planet. If that danger exists, determine the number and yield of the nuclear warheads and their intercept point with the asteroid. Then launch the appropriate missiles with warheads and guide them in flight until the intercept with the asteroid. And, finally, monitor the results of the effect of the nuclear detonations and repeat the launch of missiles, if necessary.

There's no doubt that the scientific-technical potential that was accumulated in the former Soviet Union and in the United States during the years of confrontation in the Cold War in such spheres as nuclear weapons, missiles, and detection and guidance systems is at that level that can be successfully employed to solve the tasks enumerated above.

We must point out that astronomers warned about the possibility of a collision of the Schumacher-Levy Comet with Jupiter approximately 1.5 years ago which, on the scale of space, is not that much. The astronomical (optical) surveillance systems that exist at the present time and that could be utilized to detect asteroids have low search capabilities, are at the disposal of scientists of various countries who are working on independent scientific programs, and have a number of other limitations.

In our view, it's advisable to create a single worldwide asteroid danger warning system based on existing astronomical systems and, if necessary in the future, include in it specially developed ground-based and, possibly, space-based systems. The International Nuclear Missile Danger Warning and Space Monitoring Center could become a system-forming element. The idea to create the center under the aegis of the UN has already been



discussed at Russian-American meetings and did not encounter objections although it has not yet found practical embodiment. Of course, all nuclear warheads and missiles must be under the strict control of a guidance system that is linked to that Center. We must guarantee that the missiles will be utilized only against asteroids.

These are questions to which we must seek answers already today. Can Russian and U.S. nuclear warheads and missiles that are subject to destruction in fulfillment of the START Treaty be utilized for firing against asteroids? And if they can, how do we insure them safe, from every point of view, their storage until the time when a strictly centralized control system can be developed? Is it advisable to completely terminate the production of missiles, especially R-36 (Russia-Ukraine) and MX (United States) heavy classes and to eliminate missiles that exist right now? Can, not the energy of nuclear detonations, but of other types of energy based upon new physical principles, say, laser or beam radiation, be utilized for the destruction of an asteroid or to deflect its trajectory? Of course, there are many such questions.

One of the tasks, the solution of which scientists must begin to work on today, is to what fragments must one destroy an asteroid in order to prevent harm to the Earth? One can obtain this knowledge by observing the flight of meteors in the atmosphere.

Due to the limited capabilities of optical systems for such observations, a powerful radar, that is part of the Russian and U.S. missile attack warning and space monitoring systems, is the most suitable based upon its energy and spatial specifications. However, as a result of the enormous flight speeds of meteors, that exceed the speed of artificial earth satellites and ballistic missiles by approximately an order of magnitude, these radars are not capable of combining the accomplishment of two missions: the artificial earth satellite and ballistic missile detection mission and the meteor detection mission. At the same time, the technological structures of the powerful radars that were developed to operate as part of the former USSR's missile attack warning system are still on the territory of Latvia (Skrunda) and on the territory of Ukraine (Mukachevo).

In our view, these structures could be utilized to develop purely specialized radars that are designed only for meteor shower surveillance right up to when they pass through the Earth's atmosphere. These radars could have the status of UN facilities, based upon an agreement of the parties on whose territory they are located. Under the aegis of the UN, a project to develop a meteor shower surveillance radar with the utilization of the indicated structures could be developed on a competitive basis.

Therefore, in our view, we must reject the decision to destroy the structures of the new radar at Skrunda and the millions of dollars that the United States plans to spend on the destruction of radars and direct it toward

the development of a meteor shower monitoring radar. Of course, this will require overcoming the stereotypes of a way of thinking. This should be promoted by, first of all, scientific substantiation and the guarantees of authoritative scientists and developers of various countries that the design of the meteor shower monitoring radar would exclude the possibility of carrying out military missions on behalf of any state and, second, inclusion of this radar in the UN structure in an organizational context.

Latvia could rationally have at its disposal an inheritance that was left from the USSR and gain the prestige of a country that has made a practical contribution to the prevention of a global catastrophe instead of short-term and very dubious joy from the destruction of the radar. The opportunity to provide jobs for the local population is very important for Latvia in the event of the preservation of the radar and its modification to monitor meteor showers.

#### **Moscow Favors Signing Comprehensive Test Ban Treaty in 1995**

##### **Foreign Ministry Statement**

*LD0102185995 Moscow ITAR-TASS in English  
1831 GMT 1 Feb 95*

[FBIS Transcribed Text] Moscow February 1 TASS—Russia favours signing the comprehensive Test Ban Treaty as early as this year, the Russian Foreign Ministry said on Wednesday in reply to the United States decision to extend a moratorium on nuclear tests. A Russian Foreign Ministry statement released on Wednesday said:

"Russia reacts positively to U.S. President Bill Clinton's decision to extend a moratorium on nuclear tests until a treaty on a comprehensive ban of such tests comes in force.

"Russia's position on this problem remains consequent. We have initiated an indefinite trilateral moratorium on nuclear tests and intend to firmly keep it as long as similar moratoriums announced by other nuclear powers are adhered to de-facto or de-jure. We have repeatedly called on other nuclear powers to act in this way.

"It would be appropriate to remind in this connection that in the course of Russian-American summits in Moscow in January and Washington in September 1994, Presidents Boris Yeltsin and Bill Clinton confirmed Russia's and the United States' adherence to reaching, in the shortest time, an international treaty on the comprehensive nuclear test ban, and agreed that it would be desirable to extend their relevant moratoriums on nuclear tests. In an address to the 49th session of the United Nations General Assembly, Russian President Boris Yeltsin urged the acceleration of these talks and spoke for the signing of the comprehensive nuclear Test Ban Treaty as early as in 1995, when the 50th anniversary of the United Nations Organization would be

marked. The Russian delegation at the Conference on Disarmament has been given the appropriate instructions, and we are satisfied with the shifts in a mandate of the American delegation announced by the U.S. Administration."

#### Further Report

MM0702103995 Moscow ROSSIYSKIYE VESTI  
in Russian 7 Feb 95 p 3

[Unattributed report under the general heading "At the Russian Federation Foreign Ministry": "Speeding up the Talks"]

[FBIS Translated Text] The Russian Federation is in favor of signing the Treaty on the Comprehensive Prohibition of Nuclear Weapon Tests within the current year.

A Russian Federation Foreign Ministry representative has made a statement in connection with the U.S. decision to extend the moratorium on nuclear tests. U.S. President Bill Clinton's decision to extend the moratorium on nuclear weapon tests until the enactment of the treaty comprehensively banning such tests has been positively received in Russia, it says.

Russia's stance on this question remains consistent. We were the initiator of the tripartite nuclear test moratorium of unlimited duration and intend to adhere to it firmly so long as such a moratorium declared by the other nuclear-weapon states is observed by them *de jure* or *de facto*.

Presidents Boris Yeltsin and Bill Clinton have confirmed the commitment of Russia and the United States to the rapid achievement of an international test ban treaty.

In his address to the 49th session of the UN General Assembly President Boris Yeltsin expressed himself in favor of signing the Treaty on the Comprehensive Prohibition of Nuclear Weapon Tests before the end of 1995, when the 50th anniversary of the United Nations would be marked.

#### 'Football' Designer on 25 January Missile Incident

MK0102125095 Moscow MOSKOVSKIYE NOVOSTI  
in Russian, No. 7, 29 Jan-5 Feb 95 (Signed to press  
31 Jan) pp 1, 12

[Article by Nikolay Devyanin, chief designer of the first model of the Soviet nuclear "football": "All That Has Happened, Alas, Had To Happen"]

[FBIS Translated Text] The president's admission of using his "football" ["yadernyy chemodanchik"] shows unequivocally and incontestably: /For the first time in the 10 years of its combat operation, the "Kazbek" automated strategic nuclear force control system and its user terminals—the "footballs" of the president, the defense minister, and the chief of the General Staff—were switched into an alert mode, which gave the president the technical possibility, for several minutes, by

merely pressing the button, to authorize the Armed Forces to use Russian nuclear weapons. / [words within slantlines printed in all capitals]

For the first time! What is important is that this happened not at the time when U.S. Pershings were deployed in Europe but now, when Russia has signed the START Treaty and agreements with the United States, Great Britain, and China on the "mutual non-targeting of missiles," when not only presidents but also missile workers come visiting each other just like that....

What, then, happened in the morning of 25 January, and why did this not happen in the past? One can, of course, like the president or his opponents, look for some secret springs in this incident. But as a professional, I would suggest starting elsewhere: Let us try to reconstruct this situation at each stage.

Naturally, we should start with the Norwegians, who, if reports by our military and the press are to be trusted, indicated the time of the launch like in that well-known army joke: "from the fence to lunch" [reference to a story about a sergeant ordering his men to dig a trench from the fence to—until—lunch]. I believe it is hardly appropriate to look for a malicious intent here or the intention to "check out" ["proverit"] Russia. Yet, if the indication was indeed that inaccurate, lurking behind it, I believe, is an arrogant attitude to a nuclear power. Frankly speaking, earlier, I did not believe that this was possible. I do not exclude another version, though: The note and the coded cable by the Norwegian side got into the Defense Ministry and ended up in its offices, thus failing to reach duty-shift personnel of the Missile Attack Warning System (MAWS).

The launch was detected by several Russian MAWS radars. Automatic processing of initial flight path parameters showed radar duty-shift personnel that they were not expecting such a missile....

Approach time to Moscow is five to six minutes but it is just within an arm's reach to the Kola Peninsula (it will not be forgotten that the missile is already flying). What is to be done? There was no time to ask their superiors for advice, but they did not want to become scapegoats for "another [Matthias] Rust" [the German who landed on Red Square]. In this situation the duty officers made the sole possible decision: to work according to plan, as prescribed by instructions, and as has been practiced dozens of times in drill sessions.

Combat information about the missile launch went through MAWS channels to corresponding command points, including the Russian Armed Forces top command points, which are incorporated in the Kazbek system and are linked with the "footballs" 24 hours a day. Here, all information about a flying ballistic missile, with indications of the time and place of launch, immediately popped up on MAWS terminals: the Krokus panel. For the general on duty to make a decision to put the Kazbek system on alert mode and pass the report

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about the launch of an enemy missile to the "footballs" was both easier (a combat-alert report was already glowing on his display) and more difficult (a dressing-down from the top level for the bother and panic could follow immediately). Even so, he had no one to consult either, except the "football" users: his minister and the chief of the General Staff. Be that as it may, it appeared that the best option was to follow the instructions.

A few seconds to unblock the duty officer's work place, to enter a formal report, and press the "transfer" button, and alarm signals flashed virtually at once on all "footballs." The Kazbek system went into alert mode. A few seconds later the duty officer's display began to read: His report had reached the "footballs" and had been received by the users. At the same time, a telephone conference call was arranged between the president, the Defense Minister, and the chief of the General Staff.

Next-stage actors are "football" operating officers. Their task—in the event that the system is put into alert mode—is to seize it and go (run) to report it, without thinking. Which they did. Security apparently did not hamper things. Normal, standard work was in progress. The president said: "I immediately got in touch with the defense minister and with all the requisite military commanders and generals, and we followed the flight path of this missile from beginning to end." Because its entire flight, until its fall in the area of Spitsbergen, lasted just a few minutes, it can be assumed that the president received the combat report pretty soon.

What happened next is well known. Using radar data, the place where the missile was expected to drop—far from Russia's territory—was established and transferred to the Krokus panel. Then the duty general at the command and control post put the Kazbek system back into normal operating mode. Had Yeltsin himself not told about the incident the following day, the story would have hardly received such a resonance. The president's reaction is probably natural for a man who has been in a stress situation.

Unfortunately, it is also natural given the current situation in Russia and its Army.

What is not natural, in my opinion, is something else. It is no secret that the combat operation of the Kazbek system is calculated for the military-political situation of the eighties, when nobody but the nuclear powers launched ballistic missiles. But if the current Kazbek system was created exclusively owing to the personal interest of its future users, then why have none of the owners of our "football" in the past 10 year made efforts, in good time, to modernize it and therefore the entire nuclear weapons control system? As the 25 January situation shows, this question is not at all technical but political. Whatever version finally proves to be correct, the security of mankind cannot depend on anybody's sloppiness in notifying about launches or negligence in transferring this information. The nuclear arms control system must be constantly up to the changing military-political realities.

This is all the more important considering that with every passing year there are more countries launching missiles, including ballistic ones. I believe it is necessary to work out, for instance, under UN auspices, and conclude an international agreement defining the order of notification—and the extent to which it must be detailed—about planned launches. If the agreements currently in effect are recognized as sufficient, then it must be found out who is responsible for their failure on 25 January 1995.

#### **Strategic Missile Forces Chief Interviewed** *MM0802154495 Moscow KRSNAYA ZVEZDA in Russian 8 Feb 95 p 2*

[Transcript of conversation with Colonel General Igor Sergeyev, commander in chief of the Strategic Missile Forces, at the KRSNAYA ZVEZDA Editorial Office, transcribed by Gennadiy Miranovich and Aleksandr Dolinin; date not given: "Colonel General Igor Sergeyev: Missilemen Have Launch Keys, President Has 'Nuclear Attache Case'"—first two paragraphs are introduction]

[FBIS Translated Text] The pulse of the army.... It can of course be felt best of all by people directly in command of the troops. We saw that once again during a recent meeting at the editorial office with Colonel General Igor Dmitriyevich Sergeyev, commander in chief of the Strategic Missile Forces [SMF]. Moreover, you have the report on this meeting in front of you, esteemed readers. So judge for yourselves. We intend to carry on using this format to brief you on the life of the Armed Forces and their pressing problems at first hand, so to speak.

Thus, the commander in chief of the SMF answered KRSNAYA ZVEZDA journalists' questions.

**KRSNAYA ZVEZDA:** Igor Dmitriyevich, in the context of the general criticism of our army, which has once again increased with the start of events in Chechnya, the public opinions voiced by all manner of "experts" regarding Russia's nuclear potential sound particularly sinister. They say that it poses a threat not so much in terms of combat specifications as owing to its status: The nuclear weapons [zaryady] are outdated and the missiles are becoming unserviceable.

**Sergeyev:** The SMF are barely older than the average age of the officers and warrant officers on combat alert duty. But with the proclamation of the Soviet Government decree in December 1959 setting up the SMF the world saw that the USSR had a nuclear-missile shield. And that there are delivery vehicles capable of putting a payload into space orbit and delivering warheads to a target.

With the collapse of the Union our troops acquired the status of Russian troops. The last three years have been devoted to their establishment as such. Today I can confidently say that the SMF are the main component of the country's strategic nuclear forces.

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The supremacy of the SMF in Russia's strategic triad is determined by many factors. In particular, two-thirds of the strategic nuclear forces' delivery vehicles form part of the force composition of the SMF, and three-fourths of the nuclear munitions are concentrated there. What is more, the SMF's weapons have high technical specifications, which are in no way inferior to the arms of our current partners and in some parameters have the edge over the other components of the strategic nuclear forces. This edge resides in their level of combat readiness, almost equivalent to that of a gun ready to fire; their accuracy; and the systems' survivability and controllability. The SMF are the only branch of the Russian Armed Forces where both the weapons and the troops are commanded by the president and the defense minister. The president can give an order to each launcher, setting target designations for each warhead.

As for the status of the missiles, nuclear weapons, and support systems, the publicly voiced opinions regarding an alleged threat have no objective foundation. The SMF have developed an adequate, reliable system for commissioning nuclear missile weapons and for their routine servicing and maintenance. All the requisite parameters are under constant automated monitoring. Should any malfunction arise immediate steps are taken and that is an unshakeable law for the missilemen. All levels of command monitor the elimination of a malfunction from the moment it appears until it has been completely eradicated. Every launcher's status is reflected on apparatus at all echelons of command, which ensure highly reliable control. Despite the well-known difficulties I would like to stress that the SMF's attitude to nuclear-missile weapons has not changed; on the contrary, additional steps have been taken to ensure the required security. [Sergeyev ends]

**Question from the floor:** What do you as commander in chief have to do with the "nuclear attache case"?

**Sergeyev:** It is in the hands of the president and the defense minister. I am personally accountable for the status of the troops and the missile systems and their readiness to perform their assigned tasks....

To come back to the question of the status of the SMF I must point out that, notwithstanding all the ups and downs, it is satisfactory. In terms of the main parameters for combat readiness, for instance. We have not reduced the level of combat readiness and we have retained centralized command and control. Not only in Russia but also in Ukraine, Belarus, and Kazakhstan. The situation there, including when it comes to implementing the START-I and Lisbon Protocol accords, varies. Each country has many difficulties. Less so in Belarus, more so in Ukraine, but now the situation even there has stabilized to a considerable extent. Ukraine is fulfilling its pledges to Russia. In particular, to return warheads. To date 420 warheads have been returned. Ukraine is meeting the schedule.

Difficulties have arisen in Kazakhstan....

**KRASNAYA ZVEZDA:** Can't you tell us about this in more detail? After all, it is not only our missiles there but also our people....

**Sergeyev:** The divisions stationed in Zhangiz-Tobe and Derzhavinsk are armed with heavy missiles. The public knows them as "Satan." According to the START-I treaty the "Kazakhstani" missiles have to be destroyed within seven years. We plan to do this within two years. This year alone we want to remove five regiments in Zhangiz-Tobe from combat alert duty. And disband the division stationed there. But there are difficulties with this. The Kazakhstani Government is failing to find ways of resolving the question of the real estate that we must leave behind. It is in no hurry to accept our housing stock. Yet it is good stock, properly maintained.

To date 632 warheads have been withdrawn from Kazakhstan and 266 remain. But the Kazakhstani side has vetoed their removal. Now we have to create the conditions for the storage of the nuclear munitions. But it is difficult to maintain the requisite conditions of temperature and humidity in the storage facilities. During the preparations for winter one-third of the money planned for the troops to this end was invested in the "Kazakhstani" divisions.

You asked about people.... Officers and warrant officers who have been serving here since last May without other personnel have borne all the strain of withdrawing the grouping and removing the complexes from combat alert duty. Under current laws we cannot send our enlisted men there and the Kazakhstani side has refused to provide draftees.

In a word, we need to leave Kazakhstan sooner. We are very costly. According to our calculations, tens of billions a year. Officers and warrant officers left there are working under a tremendous strain. But their only request is that their apartments are warm, that they are able to have a wash after working with toxic missile fuel components, and that they can return to Russia.

**Question from the floor:** So, have they been abandoned by the state to survive on their own?

**Sergeyev:** That formulation of the question is not entirely correct and is overly categorical. We fully appreciate the prevailing situation in the country. And the main thing now is not to aggravate the state of affairs but find reasonable and acceptable solutions.

It is bad that there is no state program for our troops' withdrawal from the near abroad. We are in effect withdrawing five divisions back to Russian territory but we have no program to provide them with housing as was the case with the Western Group of Forces, say. We can only count on our own resources and they are such that in 1994 we only managed to build 14 out of the planned 42 apartment blocks. You yourselves realize that we have nothing to sell; we are not trading in missiles or missile technologies. Extrabudgetary funds are a drop in



the ocean. Thus the housing problem has worsened. Some 11,000 missilemen on combat alert duty may end up homeless this year. On average each one of them is on combat alert duty one in three days of the year. At a depth of 40 meters, in draughts, under the strain of combat drills....

We will of course do everything we can to improve their living conditions. But can state structures keep aloof from this process? The missilemen are not only under increased strain on combat alert duty but the amount of dangerous work with warheads, missile fuel components, and dismantling silo launchers for destruction has increased inordinately.

**KRASNAYA ZVEZDA:** Igor Dmitriyevich, how do the SMF look today structurally? Has the reorganization being carried out within the Armed Forces in connection with military reform impinged on them?

**Sergeyev:** There can be said to be two kinds of troops within the SMF. The first are armed with fixed-site complexes. These are individual launch sites dispersed around the position area. At a distance that precludes two launchers being hit by one nuclear warhead. They make up around 60 percent of the grouping. Individual launch sites have a high degree of protection. Each launcher has its own receivers. Even if the command posts are disabled, the launchers are able to receive and carry out orders.

The second kind are mobile troops. They comprise launchers based on a road-mobile chassis and railroad platforms. Namely autonomous launchers like "Topol" with a single-warhead nuclear missile and rail-mobile missile systems with missiles that the West calls "Scalpel." There are 36 of the latter.

The fixed-site troops are destined to carry out a retaliatory-counterstrike [otvetno-vstrechnyy udar]. Incidentally, none of the components of Russia's nuclear triad possesses this capacity. The mobile troops serve for retaliatory actions [otvetnyye deystviya]. They are a weapon of deterrence.

As for the reorganization of the missile troops in connection with military reform, it is being carried out within the framework of the decisions adopted. At the same time the structure of missile formations and units remains unchanged since it is subordinate to the weapons that have been developed and must match the requirements as regards the organization of combat alert duty and maintaining the readiness of the troops and the maintenance and servicing system, which guarantees the main thing—nuclear security.

**KRASNAYA ZVEZDA:** Comrade Commander in Chief, doesn't the "Topol-M" modernized missile symbolize Russia's desire to "catch up with America" in the sphere of nuclear-missile arms?

**Sergeyev:** By no means. This is a matter of necessity. Let me say more; by the early 21st century Russia may be left

without any missiles at all. Until recently the SMF had seven kinds of missile system in their arsenal whereas they now have two fewer: The RT-211 (SS-13) developed by the S.P. Korolev Experimental Design Bureau No.1 and the UR-100K (SS-11), which was put on alert duty back in the days of N.I. Krylov, have recently been taken off alert duty. These missiles have totally outlived their warranty periods. The metal was giving out. It was not only ineffective but also dangerous to keep them any longer. The same fate awaits many other systems which come what may will have to be stood down. They will be replaced by the above multipurpose "Topol M" system—for silo-launched and mobile missiles. The silo-launched version "Topol M2" will replace the SS-18 missiles and some of the SS-19 missiles. The first flight trials of the modernized missile have taken place and they were successful. This year it is necessary to conduct another six launches in order to carry out the president's decree. But just 36 percent of the requisite funds have been allocated for the funding of the experimental design work associated with this prestigious project. We have operated on credit, and wages have not been paid at enterprises.... There is no second "Topol M," never mind a series.

**Question from the floor:** Why then are we getting rid of heavy missiles like the SS-18, which are unparalleled worldwide, and banking on the "Topol"?

**Sergeyev:** The "Topols" suit us in every respect. Mobile launchers have a number of significant advantages. With the emergence of high-precision weapons it is easy to hit geodesically fixed installations, even hardened targets. In that respect "Topol" has greater survivability. It even has the edge over "Pioner," which has been destroyed under the Treaty on Intermediate-Range and Shorter-Range Missiles, and over silo launchers primarily because it is autonomous. "Topol" can be launched from any point on a combat patrol route. Even sophisticated space-based reconnaissance is vulnerable to it. Its combat readiness is high, comparable to the individual launch sites. And that lends it a multipurpose character. And an APU [presumably autonomous launcher—avtonomnaya puskovaya ustanovka] can be used both in a retaliatory-counterstrike and in a retaliatory strike. So, that system is preferable. But we are not abandoning individual launch sites since we intend to place a "Topol M2" with a single-warhead missile in silos. As for the SS-18 heavy missiles, they are MIRVed and are liable to be cut back under the treaty agreements with the United States.

Moreover one must not forget that only one of Russia's three leading missile plants is left in Russia—in Votkinsk. There is no one to produce the former missiles. The division [of the USSR] into sovereign states has shown that strategic weapons should not be made even by friends. Only 60 percent of the defense enterprises that used to work for the SMF are left on Russian territory. We are now forced to develop our own Russian production-sharing and unite around 200 enterprises.

The "Topol M" is entirely Russian from the least bolt to its high-technology systems.

**KRASNAYA ZVEZDA:** But why are we giving up MIRVed missiles and switching solely to single-warhead missiles?

**Sergeyev:** Our own side and the American side deemed MIRVed missiles to be a destabilizing factor. MIRVed missiles are the result of the "Cold War" and the arms race. After START-II, which set limits on the number of launchers, there was a temptation to have a large number of warheads per launcher. And these systems were developed. But you cannot go on constantly threatening one another. Especially since the United States, as we can see, adheres to similar views and a similar line of conduct regarding nuclear deterrence.

START-I and START-II, which reduce the threshold of nuclear danger, are beneficial for us. If we stop at the level we have attained—3,000-3,500 warheads—then compared to the U.S. strategic nuclear forces we will have reduced by a factor of four the difference in terms of counterforce potential and we are virtually comparable in terms of the potential for retaliatory action.

We lost out over the system of combat command and control. The U.S. system of command and control was more sophisticated. Moreover, ours was manufactured solely in Ukraine. Therefore we were forced to develop our own, more modern system.

Last year we conducted a military-technical experiment within the framework of the combat command and control system. This is a computerized, automated system. It has been installed on launchers and command posts. And it makes it possible to have a "battle" of skill not numbers.

This experiment, conducted with the Defense Ministry and the General Staff, confirmed the system's promise and the correctness of the design solutions, as enshrined by the government decree.

The new system may become the basis of the combat command and control of the strategic nuclear forces. This is all the more important in that, in our view, the integration of the strategic nuclear forces is inevitable.

**Question from the floor:** Can a missile take off with a malfunction?

**Sergeyev:** Yes, it can. The reliability of missile weapons is ensured by the whole system of commissioning and warranty inspection and servicing by the manufacturer throughout the life of the missile system. Reliability is design-based. But whereas previously designers provided double or triple backup systems, now they multiply [mazoritiruyut] them. This means that there may be faults in a missile but the signal will find the way to its ultimate objective. And override the malfunction [vydannyy impuls naydet put kotoryy vyvedet k konechnoy tseli. I minuyet otkaz]. That boosts the degree of reliability.

....On the whole, notwithstanding all the problems within the SMF, they are seeking means of resolving them. And you can have no doubt that anything that is up to the missilemen themselves will be done.

#### **Progress Toward START I Treaty Fulfillment Discussed**

95UM0241A Kiev NARODNA ARMIYA in Ukrainian  
24 Jan 95 p 1

[Unattributed article under the rubric "International Review": "Nuclear Disarmament Almost at Our Own Expense"]

[FBIS Translated Text] The Supreme Soviet of Ukraine approved a resolution in November of last year for the accession of Ukraine to the Nuclear Nonproliferation Treaty [NPT] as a nation not possessing such weapons. The process of nuclear disarmament in the world was actually launched thereby. A way out of the difficult situation into which Ukraine had fallen by inheriting the nuclear weapons deployed on its territory from the former USSR was finally outlined. Our state, having gotten rid of its negative image, was now organically a part of the world community, without complexities and restrictions, with all of the consequences arising therefrom. The sword of Damocles that has been hanging over the people of Ukraine and its land will soon be taken away.

We would also point out that Ukraine has actually already begun the realization of the terms of the START-I Treaty, which was ratified by the Supreme Soviet in 1993. Forty missiles have been taken out of service, and more than 300 nuclear charges have been removed to Russian enterprises for their further dismantling and destruction. This has moreover been done for the SS-24 intercontinental ballistic missiles, the most modern in combat characteristics, as was stipulated in the trilateral declaration of the presidents of Ukraine, Russia and the United States. The accession to the NPT is a new and substantive step toward complete nuclear disarmament. Our state, in short, has done virtually everything in this area that has been asked of it by the world community.

But here we must address the problems that have unfortunately arisen, are arising and, certainly, will arise before the young and still economically weak Ukrainian state. Colonel Volodymyr Tertychnyy, the deputy chief of the center for administrative control of the strategic nuclear forces of the MO [Ministry of Defense] of Ukraine, has directed our attention toward them.

Ukrainian specialists had earlier compiled estimates showing that the expenditures for nuclear disarmament are almost equal to the expenditures for the arms themselves, and that the burden lies heavily on our state budget. The comprehensive program of gradual cutbacks in land- and air-launched nuclear arms we have developed will be another 2.5895 billion U.S. dollars "in the cost area." Whence it is obvious that Ukraine is unable

to fulfill completely the obligations of the START-I Treaty without appropriate assistance from the world community.

But it is well known that the United States has promised to allocate 350 million dollars in the near future under the Nunn-Lugar law, and then possibly another 100 million. The other developed Western countries have also promised 10—15 million dollars each. These sums, added together, make a definite impression. But they are granted with certain restrictions, and thus do not reflect the true dimensions of the assistance that could be given to Ukraine.

The United States, for example, under that same Nunn-Lugar law may offer assistance only for the needs of disarmament (in the form of equipment and logistical support manufactured at American enterprises), and only in fulfillment of organizational and legal procedures stipulated by the estimate. And if we total the spending for the performance of various types of tender offers, the conclusion of contracts, the shipment of the equipment and the logistical materials to Ukraine—most of which, by the way, could be manufactured here—and the arrangement of the system of servicing and support, then the sums indicated above begin to melt before our eyes.

And we still have to fulfill requirements pertaining to the rehabilitation of the environment in the places where the destructive components of the missile infrastructure were located, and provide for the social status of the servicemen who are being discharged in the process of realizing these liquidation measures. The Ministry of Defense of Ukraine estimates that some 700.5 million dollars will be required for this latter alone, as well as 95 million for ecological safety and 1.4365 billion dollars for the liquidation measures, including the recultivation of lands.

Ukraine has so far actually received equipment and logistical materials in assistance worth more than seven million U.S. dollars, even though the current U.S. administration, as has become known, has promised to increase aid to Ukraine for these purposes. One would like to see that these promises do not remain just promises.

The highest officials of our state and Ukrainian diplomats turn out to have every grounds to demand an increase in assistance from the world community for the nuclear disarmament of Ukraine. The amounts should correspond to the spending and the amounts of work that are being performed in this area. It is also obvious that the assistance should be granted, so to speak, in advance, and has to compensate for more than the cost of the liquidation measures alone. Our own indicated interests in the spheres of ecology, safeguarding of the environment and social protections for Ukrainian servicemen, finally, should also be taken into account.

#### **Discussions With Americans on Missiles, Launchers**

*95UM0241B Kiev NARODNA ARMIYA in Ukrainian  
26 Jan 95 p 1*

[Unattributed article: "The Funds Exist. How Are They Being Used?"]

[FBIS Translated Text] A working group from the U.S. Defense Department headed by the Deputy Assistant Secretary of Defense John Roberto visited Ukraine from January 10 through 12. The primary aim of the negotiations and consultations of the American specialists with the Ukrainian delegation was to seek ways of making the most efficient use of the funds that have been allocated by the U.S. government for the elimination of nuclear weapons in Ukraine.

The specialists from the Ukrainian military department discussed with the American specialists the receipt of special equipment in Ukraine and the construction of the necessary facilities and structures. Members of the American working group visited the construction site of a storage area for the components of liquid missile fuel that is being erected in the town of Shevchenkovo near Kharkiv with U.S. assistance, and they also visited Pervomaysk, where they inspected missile launch silos: a training one in which the technology for destroying the launch silos was worked out, and an empty one that is subject to destruction.

During the negotiations the parties reached agreement on the fact that the social problems of the missile soldiers will have to be solved concurrently with the pace of destruction of the Ukrainian missile weaponry.

#### **UK's ABM Plans Seen As Start of 'New Round' of 'Star Wars'**

*MM0702103095 Moscow PRAVDA in Russian 7 Feb 95 p 3*

[Report by Pavel Bogomolov: "The 'Star Wars' Program: Round Two. It Is The Russians Who Are Destined To Pay the West for the Third World's Missile Ambitions"]

[FBIS Translated Text] London, 6 Feb—The not so distant period of the Cold War, when the territory of Britain and a number of other West European countries was dotted with U.S. medium-range missile launchers, could well happen again. And it could happen, staggering as it may seem, in completely different conditions—after the "fall of communism" and the disappearance, long awaited by the Atlanticists, of the "strategic threat from the East."

The British Defense Ministry, which has been holding intensive talks with its transatlantic ally, is analyzing the possibility of the Pentagon's involvement in resolving the question of a more reliable ABM defense system for the United Kingdom. This could be carried out either by purchasing the next-generation ABM system in the



United States or by the direct deployment on British soil of U.S. contingents with the latest systems for the interception of foreign ICBMs. "So what?" the impatient reader will ask. "Let them buy or deploy, it is their right."

But the point is that the ABM system in question here does not exist yet! Furthermore it should not exist in principle—that is stipulated by a major international legal document, namely the 1972 Soviet-U.S. treaty signed specially for this purpose. As it prepares for the meeting with Boris Yeltsin in May the White House is behaving quite properly with regard to "antimissiles"—all the information leaks suggest that if there is reciprocity from the Kremlin, Washington is set on further reducing the cost of the existing means of defense against "ballistic shocks."

In the Old World, however, and in London in particular, people have suddenly discerned a dangerous symptom in "Clinton's pacifism" (!)—and they are sounding an alarm which the new bosses of the Senate and Congress across the Atlantic are hearing loud and clear. Having ousted their spineless opponents from Capitol Hill, the dynamic Republicans have been successfully forming a bloc on the ABM issue with the Pentagon, which is clearly hungry for a new round of the arms race. John Shalikashvili, chairman of the Joint Chiefs of Staff, and Senator Bob Dole are starting the campaign for the creation of interceptor missiles with a speed in excess of 3 km per second.

What name is to be given to all this? The weapons makers are calling this venture a "limited ABM system for potential theaters of military operations." Limited? But even in the United States critics of the U.S. military-industrial complex' ruinous plans are openly saying that this is the offspring of the "star wars" program which even Reagan's "hawks" did not implement. There you have it! You can argue about "local theaters" as much as you like, but the grandiose scale of this plan cannot be hidden. Because the Russian experts have in fact been protesting against such plans at the Geneva talks for two years now.

It seemed not so long ago that the West understood Moscow's misgivings on this score at least partially. Now, however, that understanding is about to evaporate. It is not only the Americans who have suddenly discovered that they urgently need a new ABM system but also the British and other adherents of the "indestructible defense" of European civilization. "What are we doing to make you so afraid?" the Russian side is wondering.

"Perhaps it is not your fault," they tell us. "Maybe instead it is Iran and Libya, which want to buy modern ICBM's from the DPRK. Furthermore, Iraq does not want to forego its Scuds. India, Pakistan, and Saudi Arabia also have high-tech ballistic systems.... Who knows, perhaps all this will one day rebound on the NATO countries? So it would be better for us to cancel the signatures of Brezhnev and Nixon on the 25-year-old

fundamental document, rearm ourselves to the teeth again, and furthermore do so on a qualitatively new basis.

I should like to ask the following question: Why is it that Moscow, which in recent years has done more than anyone else to achieve a global reduction in the level of nuclear missile confrontation, should now forego its security once more for reasons totally beyond its control? Yes, many developing countries have seen from their own bitter experience the defects of the "new world order" and are feverishly hurrying to create their own counterbalance—counter to the unipolar hegemony of the Western and, first and foremost, the U.S. military-industrial complex. But are the Russians really to blame for this? On the contrary, we constantly warned that when the eliminators of the "Soviet threat" had gotten over their "post-communist" euphoria they would again run into a host of undesirable problems and complications. Unfortunately nobody listened to us. Instead they are now angrily blaming Moscow and demanding the wholesale dismantling of the achievements of detente and common sense, without which the military-political atmosphere in the West will finally become a living hell.

#### U.S. Accused of 'Foul Play' Over ABM Treaty

MM3101102795 Moscow KRASNAYA ZVEZDA  
in Russian 31 Jan 95 p 3

[Article by military observer Manki Ponomarev: "Maneuvers Verging on Foul Play: Attempts To Undermine the ABM Treaty Being Made in the United States"]

[FBIS Translated Text] The 1972 Treaty Between the United States and the USSR on the Limitation of Anti-Ballistic Missile Systems (the ABM Treaty) remains even today a most important factor for stabilizing the situation in the world and for ensuring international security. Even though the United States for one reason or another has made numerous attempts to interpret the spirit and letter of this document in its own way and even to refuse to observe its fundamental requirements entirely, sensible forces in Washington ultimately managed to head off the attacks on the treaty. First and foremost undoubtedly because our country has constantly and firmly argued that the treaty is inviolable and that its principled provisions are immutable.

Life does not stand still of course. New circumstances emerge which must be studied carefully, requiring certain additions to be made to the treaty. In this connection a fairly intensive negotiation process is taking place within the framework of the special Standing Consultative Commission which meets at regular intervals in Geneva. The next session is scheduled for March.

Here is a circumstance that has emerged this time. The opponents of the ABM Treaty have come to life in the United States—for the umpteenth time! Last week, for example, 22 senators headed by Robert Dole, leader of the Republican majority in the upper house of Congress,



urged President Bill Clinton to break off the consultations in Geneva. Their appeal was based on the argument that such consultations "threaten to undermine the efforts" of the Pentagon to create the modern theater ABM system known by its abbreviation THAAD [Theater High Altitude Area Defense].

The senators' appeal came soon after Christine Shelley, an official U.S. Department of State spokesman, had acknowledged that the United States intends to conduct tests within the framework of the program for creating a prototype of a new mobile interceptor missile. It is planned that this missile, which is designed to intercept and destroy operational-tactical and tactical missiles, will undergo 14 flight tests within two years.

In a report on the forthcoming tests, THE WASHINGTON POST noted that the U.S. Administration has decided to begin these tests even though the talks at the Standing Consultative Commission on coordinating the THAAD system with the 1972 ABM Treaty are still not complete. According to the newspaper report, the "directive to begin these tests was issued by President Bill Clinton" after he "accepted the Pentagon's weighty arguments" that these tests will not "breach the ABM Treaty." Furthermore, according to THE WASHINGTON POST's information, when the President issued this directive he was guided by the view that the new system's flight tests will not contravene any agreement with Russia in the arms control sphere because this is merely a question of "demonstration" launches and the study of the effectiveness of individual components, not the entire system as a whole. However, there will be no tests of the system as a whole when it is "capable of processing data from space sensors."

Perhaps we could accept the U.S. argument that the beginning of tests on a nonstrategic ABM defense system or, in other words, a theater ABM defense system is still not evidence of a U.S. refusal to observe the ABM Treaty. The latter says nothing about "nonstrategic" ABM defense, that is, defense against tactical and operational-tactical missiles. At the same time the treaty clearly does not allow missiles, launchers, and radar which are not antimissile missiles, antimissile missile launchers, and ABM radars respectively to be given the ability to combat strategic ICBM's or their components in their flight path or to test them for ABM purposes.

However, there is no detailed explanation of these provisions in the text of the Treaty. The Standing Consultative Commission is working to plug these "gaps" right now. As Russian Defense Ministry experts told this author, the commission's task is to elaborate a set of precise parameters which preclude the possibility of creating a nonstrategic ABM defense system of this kind which would be able to destroy not only operational-tactical but also strategic ballistic missiles. With no distinction between nonstrategic and strategic ABM systems a situation could emerge which would circumvent the 1972 Treaty and the world could face the threat of a new round in the nuclear missile arms race.

In America, too, realistic circles understand that well. As an example let me cite a NEW YORK TIMES editorial which had the remarkable headline "The Wrong Defense, the Wrong Enemy." This article contains a well-argued critique of those people in the United States who call from time to time not only for the creation of a theater ABM defense system but also for a complete return to the idea of deploying an extensive ABM system for defense against strategic missiles, which is banned by the ABM Treaty. "The United States can test and deploy an ABM defense system, for example, improved Patriot anti-air systems, to counter missiles like the Scud," the newspaper remarks. "However, what the Pentagon wants in its desire to counter ICBM's, which none of America's potential enemies will be able to create for at least a decade, is to test a defense system similar to THAAD."

"The Russians quite rightly are skeptical of all this," THE NEW YORK TIMES concludes. And in that regard it is quite right. One might even put it more forcefully. Because, contrary to the spirit of Russian-U.S. partnership relations, the United States is embarking on the practical development of a nonstrategic ABM system without waiting for the Standing Consultative Commission to come up with accords.

In preparing to test the main components of a mobile ABM system designed to intercept and destroy operational-tactical and tactical missiles, the Pentagon is verging on foul play, to use a sports metaphor. But that is not all. It is doing everything possible to draw other countries, first and foremost Japan, into the orbit of its activity at the edge of what is permitted by the ABM treaty and perhaps even going beyond the permissible.

Last fall Washington offered Tokyo the role of equal partner in the implementation of the project to create a theater ABM system. Japan was offered participation in all stages of the creation of this system—in developing the technologies, producing and deploying components, and even monitoring the operation of the "missile shield."

It has been reported in the foreign press that these proposals envisaged not only enhancing the combat potential of Patriot interceptor missile systems by replacing them with the very latest PAC-3 systems but also the eventual adoption of the high-altitude extended theater ABM system with space-based components. Furthermore, four versions of the deployment of four or five such systems on the Japanese islands were put forward simultaneously.

As far as is known, Tokyo has not yet accepted the U.S. proposals in full. Nevertheless, a joint expert group is already being set up to study the merits and flaws of the U.S. THAAD system which, it is believed, could destroy missiles at an altitude of up to 150 km. The Americans calculate that on this basis they will be able to gain access to the latest Japanese technologies while the Japanese will reap major dividends from Pentagon orders.

There are other facts which provide irrefutable evidence of the maneuvers by U.S. opponents of the ABM treaty aimed at circumventing it. But it is not the list of them that matters. One thing is clear: The Russian side's stance must remain unambiguous: This treaty must unquestionably be preserved and strictly observed. And the necessary additions can be elaborated through joint efforts within the framework of the Standing Consultative Commission and formulated in the corresponding agreements.

**Space Link-Up, SDI Resumption Contrasted**  
*MM0902120195 Moscow IZVESTIYA in Russian*  
9 Feb 95 p 3

[Article by Melor Sturua: "Star Wars and Star Peace"]

[FBIS Translated Text] Minneapolis—At a time when the entire world is applauding the Mir-Discovery duo which has been dancing an amazing pas de deux in space, the "Star Wars" program is being revived under the vaults of Washington's Capitol building. To paraphrase Mark Twain, we can say that former U.S. Defense Secretary Les Aspin was clearly exaggerating when he announced the death of "Star Wars" in 1993. As if "on purpose" the beginning of the revival of the "Star Wars" program coincided with the 12th anniversary of its proclamation by President Reagan. During this period \$6 billion was thrown into it, but no "laser dome" was created over the United States.

Having taken control of Congress, the Republicans are determined to demothball their idol's favorite brain-child. As was stated in their manifesto "A Contract With America," Congress should give the Administration a directive to "develop a highly effective defense from a practical viewpoint in the very near future." This, of course, sounds more like a contract with the military-industrial complex than with America. Newt Gingrich, author of the "Contract With America" and the new speaker of the House of Representatives, who recently congratulated the crew of the Discovery (including our cosmonaut) over the phone, stated at the same time that the end of the Cold War by no means meant the automatic end of "Star Wars." (Gingrich is mad about space technology—civil, military, any kind).

The new "Star Wars" program is less comprehensive but no less costly. Its first phase is the deployment of 100 interceptor missiles at one site—Grand Forks, North Dakota—as permitted under the 1972 ABM Treaty. The cost of this stage will be \$21.8 billion. But the Grand Forks project would "cover" middle America, leaving its eastern and western seabords unprotected. Erecting ABM "shields" for all 50 states would require another five Grand Forks-style projects costing \$12.5 billion each. Construction of Grand Forks is scheduled for completion in 2004.

A legitimate question arises: Whom do the new "Star Wars" contenders want to protect themselves against?

The same old "Soviet threat," which has now become Russian, and the Chinese threat. That, so to speak, is for starters. The Republicans are quite skillfully manipulating the latest CIA information, according to which 15 countries now have ballistic missiles and their number could grow to 20 by the end of this millennium. And although the CIA has a well-established and unhealthy reputation for exaggerating the external threat to U.S. security for political purposes, its statistics continue to be a powerful lever in the arms race. Moreover, this is all very patriotic. As Senator Strom Thurmond, the old man who currently heads the Senate Armed Services Committee, stated: "The protection of our homeland against direct attack is the top priority in the Constitution. But this aspect of our national defense is being crazily neglected." S. Thurmond stands shoulder-to-shoulder with Gingrich the "space fan": "One fine day, statistically speaking, something could happen, and we need to have a shield covering the entire continent to guard against that eventuality. Although we are talking about large amounts of money, it is a very small investment when set against the destruction of even a single city."

Even the "less patriotic" Democrats are by no means doves. But they are more realistic and take better account of time and money. According to the new Pentagon leadership's estimates, it will take at least 10 years for a new state with the nuclear missile potential of a Russia or a China to emerge. The Pentagon now believes that the development [sozdaniye] of a battlefield ABM defense along the lines of modernized Patriot missiles or THAAD [Theater High Altitude Area Defense] interceptor missiles is more timely. "Star Wars" as such is not being forgotten, but it is to be on a more modest scale and is something for the distant future. But the Republicans are not getting flustered. Clearly, by the end of this month the House of Representatives, where Gingrich's party has a majority, will be adopting the necessary legislation and demanding that Defense Secretary William Perry submit a plan for the deployment of phase one of "Star Wars" within 60 days! "The budget hawks are prevailing," Lawrence Wright, one of the leaders of the ultraconservative Heritage Foundation think tank, commented.

...It was an impressive spectacle—the 122-foot Discovery and the 108-foot Mir space station, moving at a speed of 17,000 miles an hour at an altitude of 200 miles above the Pacific Ocean, simulated the docking which is due to happen in June. This impressive beginning will be followed by an even more impressive ending—the creation of an East-West space station by 2002. Admittedly, we are still far from that ending. And there are lots of obstacles in the way—not only technological, but financial as well. The estimated cost of the project will be \$43 billion to the U.S. taxpayer alone. But even this sum—which is astronomic in every respect—is less than the price tag that comes attached to "Star Wars." But the main thing is that it is a payment for peace and progress rather than for war and destruction.

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### Missile Disarmament Reportedly Behind Schedule

AU0902114595 Berlin TANGO in German  
9 Feb 95 pp 39-40

[Report by S. Schellenberg and S. Hutchinson: "Scandal at Russia's Nuclear Graveyard"]

[FBIS Translated Text] The entrance to the Russian nuclear missile graveyard in Surovatikha, 400 kilometers east of Moscow, is heavily guarded. Only with a permit right from the top, from the general staff of the Russian Army, is TANGO allowed to pass the men carrying Kalashnikovs. Moving through a thicket on a bad road, we arrive at "work station no. 101," a dilapidated building made out of dirty concrete plates. In front of it, gigantic metal pipes with a diameter of three meters are rotting away, as if they had been left there carelessly: SS-18 nuclear missiles, NATO code name "Satan." From the Russian launch pads they are able to reach any point on Earth and devastate entire cities at one blow. Here in Surovatikha the world's biggest intercontinental missiles are waiting to be scrapped.

Actually, they should have been destroyed long ago. But Russia is lagging behind its international obligations for disarmament—out of sloppiness, out of lack of money, and, perhaps also because President Boris Yeltsin and his Defense Minister Pavel Grachev do not like to give up their dangerous toys. The Kremlin is supposed to scrap 44 of the 300 SS-18 missiles, which are still stationed in Russia—this is required by the SALT and START disarmament treaties—until all "Satans" have been reduced to scrap. However, last year the disarmers in Surovatikha managed to scrap only 36 missiles, the year before just 32.

The proper dismantling of a missile takes 10 days. "The disarmament of the nuclear superthings will take at least another 10 years," it is said in Surovatikha, even though last autumn Bill Clinton and Boris Yeltsin grandly stated that the missiles are being scrapped "much more quickly than required by the treaties."

Colonel General Igor Sergeyev, commander in chief of the strategic missile forces, is hardly bothered by international agreements: "The gigantic nuclear missiles are not destroyed out of love for peace," the highly decorated officer admits, because nowadays there are more "promising" and more mobile missiles.

In Surovatikha security regulations are not so strict. Bored, a single young man with a gun is patrolling in front of the nuclear mass destruction weapons. A few meters away two uniformed men are pillaging the valuable metals of the supermissiles. "Here one can find gold, silver, platinum, and lots of nonferrous metals," the soldiers say. After all, each "Satan" contains several kilos of rare metals.

### The Dangerous Missiles Are Turned Into Garages for Cars

The pillaging has a reason: The soldiers have not received any pay for months. Thus, they are pursuing their little deals

with a lot of imagination: They are selling the large missile pipes as light garages for cars, smaller ones can be used as sewage pipes in road construction. Armament conversion *a la Russe*.

The arbitrary ransacking of the "Satans" is not without dangers. The nuclear warheads—up to one metric ton per "Satan"—have been defused, but there remains highly poisonous fuel in the missile. Workers are tackling the corrosive acids using gas masks, protective suits, and special suction pipes.

The experts of the Surovatikha missile graveyard have long applied to Moscow for new equipment to be used for practical disarmament. "But no one gives us money," chief engineer Vladimir Bessarab says angrily. "If things continue as they are, I do not know how we can keep our international obligations."

Some people, like Lieutenant Sergey Ivanov, are not particularly eager for this to happen, anyway: "All the beautiful technology ruined; that is sad."

### Eight Killed in Conventional Disarmament Accident

LD0902103295 Moscow ITAR-TASS World Service  
in Russian 0947 GMT 9 Feb 95

[FBIS Translated Text] Khabarovsk, 9 Feb—Eight employees of the Khabarovsk territory's internal affairs directorate lost their lives as a result of an accident on Wednesday. ITAR-TASS has learned that a group of experts was told to disarm and destroy old grenades at a special training ground. Sappers accompanied Special Purpose Militia Detachment men and material and technical supply sub-units of the local internal affairs directorate.

As a result of the accident, four Special Purpose Militia Detachment staffers and four specialists from the material and technical supply sub-units lost their lives. A special commission is investigating the causes of the accident.

## ARMENIA

### Yerevan Ratifies Convention on Chemical Arms Prohibition

LD0402134195 Moscow ITAR-TASS in English  
1226 GMT 4 Feb 95

[By ITAR-TASS correspondent Valentin Volkov]

[FBIS Transcribed Text] The Hague February 4 TASS—Armenia has become the 22nd country to ratify the convention on the prohibition of development, production, stockpiling and use of chemical weapons and their destruction, the secretariat of the preparatory commission on the establishment of an organization on the prohibition of chemical weapons reported here on Saturday.



A press release points out that the instrument of ratification has been already handed over to the U.N. secretary general who is a depository of the convention.

The convention on the destruction and prohibition of chemical weapons which was opened for signing in Paris on January 13, 1993, will come into force 180 days after the depository receives 65th instrument of ratification.

The number of countries which signed the convention, now stands at 159. The process of ratification was completed by 22 of them.

Following the enactment of the convention, the organization on the prohibition of chemical weapons headquartered in The Hague will carry on practical implementation of the provisions of this international document.

## BELARUS

### U.S. Team's Visit, Discussion of Nunn-Lugar Law Reported

WS0302144795 Minsk Radio Minsk Network  
in Belarusian 1100 GMT 3 Feb 95

[FBIS Translated Text] A U.S. delegation headed by Dr. Gloria (Duffy), deputy secretary of defense, special coordinator of the program for mutual elimination of threat, has completed its visit to Belarus. In the course of negotiations with the Belarusian military officials, discussed further were joint steps toward the implementation of the U.S. Nunn-Lugar law which stipulates U.S. assistance for Belarus, Russia, Kazakhstan, and Ukraine in the liquidation of nuclear arms and conversion of the enterprises of the defense industry. The sides discussed forms of assistance and methods to render it in the sphere of retraining Belarusian officers dismissed from the Army, as well as the creation of normal conditions for their further activities.

### CIS, German Delegations Attend Seminar on Chemical Arms Ban

WS3101113695 Minsk Radio Minsk Network  
in Belarusian 0800 GMT 31 Jan 95

[FBIS Translated Text] A regional seminar was held in Minsk at the level of governments and chemical enterprises, which was a preparation for the implementation of the convention on banning chemical arms. The seminar was organized by the Belarusian Foreign Ministry and was attended by delegations from Armenia, Belarus, Kazakhstan, Moldova, Russia, Ukraine, Lithuania, Turkmenistan, Germany, as well as by CIS Secretariat officials and the preparatory commission of the Organization for Banning Chemical Arms. On 7 February, Belarusian Foreign Ministers Uladzimir Syanko is to meet the preparatory commission's Executive Secretary Jan (Kongen).

### Belarus Enters 'Third Stage' of Conventional Arms Reduction

WS2601100795 Minsk Radio Minsk Network  
in Belarusian 0400 GMT 26 Jan 95

[FBIS Translated Text] The implementation of the Conventional Armed Forces in Europe Treaty has entered its subsequent phase. In the course of the third stage of reductions, Belarus will continue to liquidate military equipment as provided by the treaty. The process of reductions, as earlier, will be closely observed by the states being party to the treaty.

### U.S. Pledges \$6 Million for Removing Russian Rocket Fuel

WS2601125495 Minsk BELAPAN in English  
1800 GMT 25 Jan 95

[FBIS Transcribed Text] The discussion of the whole range of projects for cooperation between the Republic of Belarus and the United States under the Nunn-Lugar program, the inspection of the purpose-oriented use of the resources that were given by the U.S. Government for the implementation of six agreements in this field, as well as the discussion of the projects of subsequent cooperation, were the objectives of the visit of the delegation of the U.S. Department of Defense, headed by Gloria Duffy, deputy assistant of the U.S. Secretary of Defense, which were declared at a press conference. According to Mrs. Duffy, during official meetings with representatives of the Belarusian Government and a number of ministries, the delegation expressed the U.S. Government's opinion about the subsequent cooperation in the field of disarmament, and attached greater importance to defense conversion and housing construction for the former servicemen demobilized from strategic missile forces. In the course of the talks, the sides came to the conclusion that an agreement was urgently necessary on the utilization of rocket propellant, of which about 15,000 tonnes will be left by Russian military troops after their withdrawal. For this purpose and for the liquidation of immobile constructions for the stationing of the launching pads of the SS-25 missiles, the U.S. Government plans to allot 6 million U.S. dollars. However, according to Major General Yuriy Partnow, assistant of the Belarusian minister of defense for the realization of military policy, the liquidation of these immobile constructions is the duty of the Russian Federation which is withdrawing its troops from Belarus. Eventually, the U.S. experts agreed that \$6 million will be used in the first instance for the utilization of rocket propellant. Mrs. Duffy expressed her content that the resources the U.S. Government had given under disarmament agreements had been used efficiently, and assured the Belarusian side that the U.S. Congress would continue participating in the financing of arrangements carried out in Belarus in this field.



## LITHUANIA

### Seized Radioactive Substance To Be Stored at Ignalina

WS3001123295 Tallinn BNS in English  
1300 GMT 28 Jan 95

[FBIS Transcribed Text] Vilnius, Jan 28, BNS—The Environmental Protection Ministry on Friday gave permission to transport 2 tons of radioactive wolfram seized on Lithuania's border with Belarus to the Ignalina nuclear power plant where it will be temporarily stored. The wolfram, which was seized Wednesday, was stored for two days at the Medininkai border post.

As reported, the seizure occurred after border police detained a truck which emitted radiation levels dozens of times above normal. The level of radioactivity outside the truck was between 800 and 1,000 microroentgens per hour and 3,600 microroentgens per hour inside it. The maximum permissible level is 60 microroentgens per hour. The radioactive wolfram was found in a secret compartment behind a double wall in the truck's trailer.

Police arrested the truck's driver, the owner and two men who were waiting for the cargo to pass through customs. They all face charges of smuggling nuclear substances to Lithuania. It is supposed that the wolfram was to be shipped to the West. Officials say the cargo is worth around 7,300 U.S. dollars.

### Shortage of Equipment To Combat Nuclear Smuggling

WS2701150195 Tallinn BNS in English  
1000 GMT 27 Jan 95

[FBIS Transcribed Text] Vilnius, Jan 27, BNS—Lithuania experiences a great shortage of special equipment needed to detect nuclear substances smuggled to or out of the country, Customs Department Director Vitalijus Gerzonas said Thursday.

Radioactive substances at the Kalvarijos and Medininkai posts on Lithuania's border with Poland and Belarus were detected this and last week only because the posts had stationary radiation detectors donated by the United States, Gerzonas told a news conference. One such detector costs 10,000 U.S. dollars, he said.

Until now, customs officials relied only on police information about suspected attempts to smuggle nuclear substances, Gerzonas said. He recalled a case when a shipment of radioactive beryllium was brought to Vilnius in May 1993 and stored at a commercial bank.

Gerzonas said each Lithuanian border post has portable Geiger counters, but only two per shift. In his opinion, every border post should have a stationary detector, which he says are especially needed at railroad posts, because large amounts of metals are transported by rail.

Gerzonas also told reporters that Lithuanian officials have so far disclosed 17 drug trafficking cases. Poppies cannabis and marijuana were seized in most cases.

The official said the struggle against smuggling became more active last year but was still not as efficient as desired. 1,200 cases were disclosed last year, which is about 300 cases more than in 1993, he said.

Last year, the Customs Department collected 574 million lits in taxes. Gerzonas said the state profited by 15 lits from every litas given to the Customs Department.

## UKRAINE

### Defense Ministry: Kiev Abiding by START Treaty Terms

LD2401101895 Kiev Radio Ukraine World Service  
in English 0400 GMT 24 Jan 95

[FBIS Transcribed Text] Ukraine's Defense Ministry press service has held a briefing dedicated to the development of the armed forces and cooperation with the military departments of other states. All those present were also informed about the course of fulfillment of the terms of the START Treaty, about the military cooperation with the CIS countries, participation of a Ukrainian observer in the Turkish naval maneuvers in the Black Sea, and about other matters.

As was pointed out by Major General Anatoliy Palamarukh, Ukraine fully abides by the terms of the treaty on the reduction and limitation of strategic offensive armaments, START. The Ukrainian side is getting rid of the intercontinental ballistic missiles, which are stationed on its territory, as well as withdrawing and eliminating all nuclear warheads.

In line with the provisions of the treaty, the United States has started a permanent verification at the Pavlograd mechanical plant with the aim of confirmation that this enterprise has ceased the manufacture of intercontinental ballistic missiles, informed the major general.

### Missile Silos To Be Destroyed in Summer; Method Not Decided

LD2601173595 Kiev UNIAR in Ukrainian  
1300 GMT 26 Jan 95

[FBIS Translated Text] Kiev, 26 Jan—According to the Ministry of Defense, the destruction of strategic nuclear missile launch silos will begin this summer in Ukraine. However, Ukrainian military experts are as yet undecided about the method of destruction: the American or the German method. The United States proposes destroying the silos with explosives. It is well known that Defense Minister Valeriy Shmarov favors the German method because of the danger of using explosives. The majority of the facilities are located near settlements. The German method would entail cutting the launch silo constructions and concreting the lower parts. The Defense Ministry has not excluded using the American method.

**Use of Missile, Space Technologies Viewed***WS2501123095 Kiev KHRESHCHATYK in Ukrainian  
20 Jan 95 p 2*

[Article by Zenon Starchenko: "S-300 System: Everybody Is Trading But Ukraine"]

[FBIS Translated Text] At the end of 1994, the market for arms trade once again confirmed its reputation as the "market of scandals." This time, "the hero of the day" was the Republic of Belarus, whose President Alyaksandr Lukashenka decided to purchase children's medicines for money coming from the sale of components of the SS-300 missile system. Following press reports and the accusations of total corruption leveled by Deputy Syarhey Antonchyk at the president and his team, Lukashenka, who returned from Turkmenistan on 27 December, confirmed that the contract was in force. At a closed news conference for foreign journalists, he emphasized that Belarus sold only those components of the SS-300 system, which are the country's property, and furthermore, nobody was going to sell the whole system. In the opinion of Lukashenka, each country of the former USSR has the right to its share in military technologies of the superpower, and the main point in this regard is the adherence of this trade to international laws. Proceeding from this right, the Belarusian president refused to admit that the contract for the sale of SS-300 components was the reason behind the political crisis that struck Minsk.

Serhiy Zamashchykov, a "Rand Corporation" expert for markets in postcommunist countries, believes that the complications surrounding the contract are a typical sign indicating that one of the former Soviet republics considered, and still considers technologies of the other 14 republics as its property. "Nominally, SS-300, as well as the majority of military technologies inherited by CIS countries from the USSR, are considered to be Russian," the WESTERN GOALS BULLETIN, a specialized magazine (the United States), comments on the Belarusian contract. "It would be naive to think, however, that Russia will easily present collective scientific achievements as its own."

The contract and scandal surrounding it won large publicity in the West. THE WASHINGTON TIMES estimated the value of the contract at \$40 million, and the London-based DAILY TELEGRAPH reported that the firm that purchased the SS-300 components is headed by former U.S. Secretary of Defense Frank Carlucci and former Russian citizen, Academician Belikhov. The press unequivocally paid tribute to the cunningness of the Belarusian leadership, which led the contract through the system of controls over nonproliferation of missile technologies—they sold the Americans not the missiles themselves but 10 radar stations and a mobile launching system produced in Belarus.

How has Ukraine reacted to the contract, and could it replace Belarus in the sale of the SS-300 system? There

has been no reaction from our side, and judging from all signs, Ukraine did not intend to sell the system, which is also in our possession. Quite possibly, it could be explained by our unimpressive achievements while attempting to trade modern weapons on international markets. Since "stealth" technologies became a basic component of the U.S. nuclear forces, the Americans have been attaching particular attention to "surface-to-air" missile systems existing in the world, since, as a matter of fact, they represent the only protection against a "stealth" attack. The U.S. "Patriot" missile system was proclaimed one of the best such systems in the world (particularly during the "Desert Storm" operation, when they managed to defend Israel against dozens of Iraqi missile strikes). Nevertheless, the market's favorite was, and still remains the analogous Soviet SS-300 (SA-10) system. In 1993, a contract to deliver SS-300 from Russia to the United Arab Emirates became the largest contract of the Russian military in the last few years—they practically formed two antiaircraft defense regiments for the Arabs. Moreover, Russia was only able to sell the missile system after the press had reported on negotiations regarding the sale of "Synbern" and "Khyukorn" [manes as transliterated] cruise missiles to Iran by Ukraine and China. The result of the press dethronement of Ukraine and China was that Ukraine was able to sell missiles neither to Iran nor the United States, and the Arabs, frightened by the specter of Iran being armed with cruise missiles, purchased SS-300's in accordance with the aforementioned contract signed with Russia. According to General Shaposhnikov, chairman of the "Rosvooruzheniye" company, the money coming from this contract allowed Russia to modernize new types of weapons without spending a ruble from the taxpayers' pocket. Obviously, he had in mind the "Tor" system similar to the SS-300, which makes it possible for Russia to outdistance its rivals even further.

In this way, as a result of a number of unsuccessful ventures on this market still new to it, Ukraine is merely watching how professionally Russia is marketing the Middle East market and correcting "rumors" about other possible contracts with its participation. In particular, during the term of President Leonid Kravchuk, Ukrainian Government officials had to deny Ukraine's intentions to participate in the Argentine-Egyptian "Condor" missile project, and later, in the Syrian-Iranian project to modernize "Scud" operational-tactical missiles. And in the spring of 1994, already during the term of President Leonid Kuchma, Ukraine corrected information about its intentions to sell several SS-300 missile systems to Croatia.

Given the sale of the same system by Belarus, such specialists in the world's market for high-technology weapons systems as Leonard Perute [name as transliterated] (the Vector Inc. company) and William Colby (former CIA director and current expert at Electronic Data Inc.) did not miss the opportunity to emphasize

Ukraine's strange chastity demonstrated in matters concerning the exchange and sale of missile technologies. So, during a meeting with new U.S. Senate commission chairmen, Leonard Perute noted that Ukraine's behavior on the missile technology market is irreproachable for a country in which the first ballistic missile in the world was assembled. And William Colby, while commenting on the Republicans' election victory, supposed that, in the new situation, the White House Administration will be looking more calmly at Russia's irritated reaction to neighboring countries' progress and expansion on the sensitive technologies market.

So, compared with Belarus and other new independent states, Ukraine seems to be the most cautious country on the high-tech weapons market. Is this good or bad? Will political dividends coming from such tactics outweigh possible losses, or will it be the opposite? Until recently, judging by all the signs, losses, at least financial ones, were overwhelming dividends. However, the genuinely pacifistic tactics on the high technology market, particularly space technologies, have recently begun producing promising symptoms. In particular, enterprises and companies established on the foundation of the space industry's monsters (such as, for example, the "ASSO-UNITI" company which was once established with the participation of "Pivdenmash") have gradually gained experience in peaceful "projects," and are now aiming at realistic and very profitable contracts. In particular, according to certain information, during Leonid Kuchma's latest visit to the United States, the possibility of extending a \$700-billion credit to ASSO-UNITI, under state guarantees, to implement the "Ariadna" space program was discussed very seriously. During a meeting of Leonid Kuchma and Crimean Prime Minister Anatoliy Franchuk with America's business circles, also addressed was ASSO-UNITI's well known project to build gas facilities on the Black Sea—if it succeeds, the earned money may be spent on the development of the space industry. Yet

another enterprise that emerged on the foundation of the space-missile industry—"TEKOS"—is planning to launch an orbiting laboratory to produce space-technology alloys. According to the latest data, the matters of the ELSIP company are also going successfully; cooperation between "Khartron" and "Westinghouse" is beginning to acquire concrete shape.

To put it briefly, the picture seems less tragic than at first glance, if the cities that gave the world Sikorsky and Nesterov [famous pilot] are sleeping the sleep of the just, if Dnipropetrovsk, compared to which San Diego and the Silicon Valley seem to be a training laboratory, also sees such peaceful dreams, and if the 63rd Army commander outlines prospects for using the "Scorpion" supersystems for defense against meteors... Although the scope of Ukrainian technologies no longer frightens anybody, the current atmosphere of trust exists making it possible for new Yanhels and Kondratyuks [rocket specialists] to appear in the city.

The price for dividends worth several tens of millions of dollars coming from contracts signed by other post-Soviet countries on the missile technology market was scandals and suspicions, but one must choose, after all, a path to proceed on.

#### **Multinational Team of Military Inspectors Arrives**

*LD2501100495 Kiev Radio Ukraine World Service  
in English 0400 GMT 25 Jan 95*

[FBIS Transcribed Text] According to the Ukrainian Defense Ministry's press service, a multinational team of military experts from Britain, Denmark, the Netherlands and the United States arrived in Lvov aboard a U.S. aircraft. The inspection team's mission was stated as control over Ukraine's observance of the agreement on reductions in conventional armaments and forces in Europe. The inspectors are to visit the Lvov tank repair factory.



## FINLAND

### Russia Gives Assurances on Troop Levels

*LD2501195195 Helsinki Suomen Yleisradio Network in Finnish 1900 GMT 25 Jan 95*

[FBIS Translated Text] Gustav Haeggund, commander of the Finnish Defense Forces, has during his visit to Russia received information on the war in Chechnya. During his working visit, which lasted just over 24 hours, Haeggund met Russian Defense Minister Pavel Grachev. According to Grachev, the army's participation in the operation in Chechnya is ending, and leadership is being taken over by the Ministry of the Interior.

During Haeggund's visit, the strength of the Leningrad military district was also discussed. According to Haeggund, the Russians gave assurances that troops in the areas near Finland will not be increased, and that the strength of the troops will further decrease.

## GERMANY

### Country's Guided Missile Technology Reviewed

*BR3101161095 Frankfurt/Main SOLDAT UND TECHNIK in German Jan 95 pp 31-35*

[Article by Uwe Lehmann, chief of the Federal Defense Ministry's Armament Department, responsible for air-to-air guided missile design and systems technology: "Considerations for Maintaining Germany's Technological Capacity in Key Area of Arming of Fighter Aircraft"]

[FBIS Translated Text] As part of its plans to create a European defense identity, it is the declared aim of NATO members to strengthen the base for continued development of future-oriented technologies in defined key industries, and to maintain a minimum capacity for research, development, and production in these areas. The "Conceptual Guideline for Continued Development of the Bundeswehr [Federal Armed Forces]" of 12 July 1994 reinforces this intention by stating that the Armed Forces' future capabilities, as founded in security policy, must be reconciled with limitations on resources. As the Bundeswehr is presently underfunded, it continues, there is a necessity to close the gap between commitments and resources and to find the financial means to restructure the Bundeswehr: "Only in this way will it be possible to provide the urgently required investment for modern equipment, in keeping with the commitments of the forces in reacting to crises, while at the same time enabling minimum levels in an effective and competitive weapons industry, as part of German preventive security."

This intention is in no way easy to implement. In the light of reductions—in terms of size, not of quality—of material armed forces requirements and against the background of the massive subsidies to American firms, the European arms industry will in the future find it increasingly difficult to assert itself, and to regain the competitiveness it has already lost in many areas. The

scale of this problem is shown by the example of the recent merger between the two U.S. firms Lockheed and Martin Marietta. The annual revenue of the resulting industrial giant will now be larger than the total revenues of the European firms DASA [Deutsche Aerospace], Eurospatiale, Thomson, and British Aerospace. As stated in, for example, the French press, these firms will have to be regarded as no more than medium-sized by American standards. A particularly significant factor in the Lockheed-Martin Marietta merger is the very short time taken by the contractual negotiations.

There can therefore be no doubt that the present priority is to concentrate the resources of the European industry and to seek to allocate responsibilities between different firms. Financial realities therefore dictate that Germany must limit itself to certain key areas. In 1994, the Defense Ministry's Maintenance of Capacity Committee defined the industrial sectors with technologies worth maintaining and funding.

### Airborne Air Defenses: Still Cornerstone of Future Defense Programs

The dramatic reversals in defense policy—these are beyond doubt—have done nothing to detract from the major role which air defenses will continue to have. The modern fighter plane is for the foreseeable future likely to continue to be a cornerstone of any defense program. In this area, as in others, Germany could continue to promote this technology, whose past development has been achieved through high levels of national funding; this would enable it not only to make a major contribution to common European defense, but also to compete with the American industry, and also with that of Russia, which should on no account be overlooked.

Without exception, the conceptual considerations and military requirements of the Bundeswehr are based on the assumption that the arms carried by a tactical fighter will continue to consist of medium-range guided missiles (with approximately 50-70 km of range), and short-range guided missiles (with approximately 10-12 km of range). There are differing opinions about airborne cannons, though there are good reasons to believe that this weapon will still be present in the next generation of fighter aircraft.

### Weaknesses of Present Guided Missile Systems

Through extensive air combat simulations, the partners in the EF-2000 program, together with Sweden's Armed Forces, have established and documented the operational limits of the present medium-range air-to-air guided missile systems, the major players being the American AMRAAM and the French MICA systems. The Americans seem to have reached the same conclusion as the Europeans, by acknowledging that there are actual weaknesses which require removal. Press reports suggest that this is a high priority in designing the next generation of guided missile systems.

Air combat simulations have shown that the crucial weakness of the present air-to-air medium-range guided missiles is their excessively low average speed. In the future, hostile aircraft will be able to achieve—at least for short periods—acceleration of the order of 7-9 g. This means that hitting probability can dramatically fall, from fairly short distances (from approximately 15 km upward). The next stage of development must therefore be to make future guided missiles significantly faster and thus more agile over their entire flight. Subsequent improvements in combat efficiency could make it both necessary and possible to improve other aspects of missile capability, for example by modifying or redesigning the seeker head.

When the Bundeswehr took over NVA [former East German National People's Army] material, it acquired knowledge of the Russian AA-11 guided missile, which has proliferated globally. Since that time, if not earlier, urgent action has been required over the arming of fighter aircraft for short-range combat, for which the German Luftwaffe [Air Force] presently is equipped with the Sidewinder AIM-9Li guided missile.

The primary requirement for a future short-range air-to-air guided missile must be a significantly improved seeker head. The priority for such modern sensor technology must be greater detection and acquisition range; an additional requirement is improved suppression of background interference and greater resistance to jamming (IRCM). The capability for exact targeting and, especially, significantly greater agility, especially in close-in-combat (CIC) situations, will also be absolutely essential.

#### Future Medium-Range Air-to-Air Guided Missiles

In Germany, DASA has already undertaken extensive groundwork in the area of air-to-air guided missiles. Substantial Defense Ministry funding, together with the firm's own investment, has enabled considerable technological capacity to be achieved.

Solid fuel rockets have previously been the main means of tactical air-to-air guided missile propulsion. They achieve thrust by emission of exhaust gases, created by the fuel's reaction with the oxidant at high pressure inside a chamber which is enclosed, except for the jet. The oxidant is carried as part of the fuel. If the guided missile's air speed is far greater than the speed of sound, then the ambient air, admitted through a suitably shaped air intake system, can come under sufficiently high pressure for the ram air to be used as the oxidant for the combustion process in a ram-jet engine.

In 1981, under a German air test program, a high-energy solid fuel ram engine was successfully tested in free flight. Cross accelerations of up to 30 g occurred. During the program, lightweight propulsive components were produced and tested both on the testbed and in flight. Fully-stable semi-rotational symmetric air intakes were

successfully tested in operation; the operability of propellants with boron admixture was also demonstrated.

Not only in the United States, Russia, and France, but also in some Far East countries, extensive work in the area of solid fuel propulsion has been announced. This shows the need for Germany to intensify its efforts, if it is to maintain its lead. There is a particular need to concentrate on the following areas:

- Boron-containing solid fuel propellants, with extension of the range of control;
  - Reduction of the booster efflux signature;
  - Jetless integral booster (to avoid endangering the carrier plane through massive exhaust components);
  - Improved air intake systems;
  - Ongoing adaptation and improvement of control valves, heat shields, and lightweight structures.
- Except in the case of medium-range air-to-air guided missiles, ram-jet propulsion could also be used for:
- Light antiradar missiles with high average speeds at sea level;
  - Long-range antibunker weapons with significant energy at the target;
  - Antiship missiles of varying size and complexity;
  - Medium-range ground-to-air air defense missiles;
  - ATBM missiles with extremely high average speeds.

Active radar-seeker heads are important in modern missiles. The scope they offer for autonomous homing onto target, and hence for considerably enhancing the weapons system's efficiency, extends also to multiple targeting, all-weather capability, and minimizing deviation from target.

The development of new components enables the use of optimum frequency ranges in the Ku and Ka bandwidths. Atmospheric and weather-dependent attenuation provide a good compromise with measuring accuracy, which is known to improve at higher frequencies.

One of the major developments in this area is the high-capacity traveling wave tube (TWT), produced by the AEG company at Ulm. AEG's work, also funded by the Defense Ministry, has given Germany a lead and has provided input into such major programs as the Patriot ATM (Tri-Mode Missile) and ERINT (Extended Range Interceptor). The results of this work have been used by DASA at Ulm to develop a complete sender, incorporating the TWT with minimal use of space, for the Patriot ATM.

The flexibility and high coherence quality of a TWT receiver enable signals to be detected and interpreted for active radar-seeker heads. The flexibility of the process enables the use of these active radar-seeker heads, except

in the case of air-to-air missiles, including use with weapons having other tactical purposes, such as ground-to-air, air-to-ground, and antiship guided missiles.

Radar-seeker heads of air-to-air guided missiles use three different measuring processes: Their operability has already been successfully demonstrated in trials. These processes are the High Pulse Repetition Frequency Mode (HPRF), the Medium Pulse Repetition Frequency Mode (MPRF), and the High Resolution Mode. Complex processes are used, according to the air combat situation, to select the HPRF mode for counterfire, and the MPRF mode for repeated firing to suppress clutter. Both modes enable high resolution, both at a distance and at relative speed, thus providing multiple target discrimination. High-resolution mode is used to target the most vulnerable point of an airplane's structure. This enables the target to be analyzed at distance resolution of around 0.5 meters. By selecting a point of impact on the target, and by reducing glint, which is unavoidable with an active radar system, it is possible to sufficiently reduce deviation from the target to achieve a direct hit.

In case of opposing ECM, together with active measuring processes, a passive Home on Jam mode can be used. This normally enables only measurement of the target angle. However, special filter analysis of the jamming signal enables information to be provided on the actual multiple target situation, even in this case.

DASA/Ulm, which is active in this field, has already demonstrated the operability of the modes in trials.

#### Future Short-Range Air-to-Air Guided Missiles

The AIM-9L Sidewinder short-range air-to-air guided missile currently in service with the German Luftwaffe is now several decades old; despite various improvements in its combat efficiency, it has numerous systems and technological weaknesses, as a result of which the Russian AA-11 Archer is its superior in almost every respect. It is therefore becoming increasingly urgent to address the issue of a successor to the Sidewinder.

Bodensee Geraetetechnik GmbH (BGT) has been working for over 15 years on developing image-processing infrared seeker heads for future air-to-air guided missiles, initially under the German-British-Norwegian ASRAAM development program, which for compelling reasons had to be abandoned as a joint program, and subsequently under the TELL/IRIS research and development program. The overriding design parameters are primarily to achieve a large target detection range with a structured background and immunity to jamming of all kinds. These requirements can only be achieved through image-processing seeker heads using state-of-the-art technology.

The maximum speed required of the missiles—approximately Mach 4 near to the ground—together with the strong thermoshock on launch, expose the structure of the infrared seeker dome and housing to

extreme pressure; of the few materials suitable, the only suitable one was a monocrystalline sapphire.

Owing to the small amount of space available for the seeker head, it was essential to stabilize the infrared camera in a biaxial roll-nick frame. The advantages of this arrangement, compared with the conventional tri-axial platform, include its lesser weight, a significantly lower number of expensive components, and particularly, in view of the lower masses, a greater panning speed for the frame. Under the TELL program, BGT has reduced the seeker head's diameter to the Sidewinder's 12.7 cm, thus greatly reducing the volume of the inertial reference unit and the signal processing electronics.

The main requirements for the detector are high infrared sensitivity and detection range, dynamics, a short cooling-down period, and a long cool period. The 64-element cell detector selected, with mechanical scanning of the field of view, exceeds the range requirements, and is cheaper and less risky than a matrix detector. The cell detector is also largely resistant to laser jamming, as each detector cell is exposed to the laser beam for only a quite short period.

The major requirements of the image processing electronics of a missile of this kind are for resolution of multiple targets, detection of approaching targets even at long distance, target tracking even when the line of sight to the target is briefly interrupted, and, during the final homing phase, identification of the point of impact for maximum impact effect.

During several test flight programs in recent years the TELL/IRIS seeker head has been tested in the carrier plane in a variety of combat situations, against different target aircraft. In several cases, the targets were protected by such means as infrared jamming. The observed performance of the seeker head both confirmed and exceeded expectations.

A seeker head of this performance gives Germany a lead in present-day technology. Uncertainty remains, however, as to whether there will soon be a European development and procurement program for a short-range air-to-air guided missile. The requirements and bases which BGT has provided for an international program, with Germany providing systems leadership, are, however, considerable.

The mechanical gyros used for decades in the attitude sensors of air-to-air guided missiles have in recent years encountered competition from optical systems. DASA/Ottobrunn's Sensor and Control Systems Division has successfully developed a world-beating design based on a fiber optic gyro, which is particularly simple, and hence inexpensive, to install. This sensor is especially designed for guided missiles with flights lasting a maximum of approximately three minutes. It processes high rotation rates around all three missile axes and measures the high acceleration occurring along the axes. Its small volume and minimal weight enable it to be easily fitted inside the



missile. The measuring signals are interpreted at such a high speed that the output data always match the situation at the time. The total lack of maintenance required, great reliability, and long operational life of such optical systems also need to be underlined.

#### **Scope for Cooperation**

It is no secret that both the United States and Russia have been giving a high priority to designing medium-range air-to-air ram-jet missiles. West Europe presently has two projects running in parallel for the next generation of missiles:

—Great Britain has initiated development of a higher-performance guided missile with the provisional name Future Medium Range Air-to-Air Missile (FMRAAM). This decision, which has been made in principle, has, however, been made subject to the new EF-2000 actually being built. It would obviously be pointless to develop a European aircraft arms system without there being a European fighter. DASA has responded to the British initiative with a design proposal based on its own technology.

—France is planning improvements to its MICA guided missile system. This is already undergoing intensive technological activity; but a parallel develop program has not yet been initiated.

It can be expected with reasonable certainty that the planned merger between the two countries' key players in guided missiles—Matra in France and British Aerospace in Britain—will lead to harmonization of their activities. This could result in Europe having only one design, based on the use of MICA components, under development.

As there is considerable interest both in Sweden and in Italy in involvement in a European guided missile development program, the prospects for broadly-based European cooperation are quite favorable. This would, however, require rapid harmonization of the differing interests involved, so as to avoid the need to fall back again on American weapons because of lack of time.

Germany undoubtedly will take the lead in a European short-range missile program, thanks to BGT's record as the key player in the European Sidewinder licensing program. Two basic approaches are indicated:

—The possibility of launching a development program using the German TELL seeker head together with the AIM-9Li Sidewinder missile now introduced. BGT has carried out some research on this, with the working title IRIS-T. Many of the numerous countries using Sidewinder technology, particularly Norway and Sweden, have already shown interest in this solution. At present, however, there remains a lack of clarity over the share of the program costs which would need to be borne by such countries.

—Another interesting project would be a short-range guided missile with the German TELL seeker head and MICA components as its major features. Matra and BGT have already produced their own design concept for this, financed from their own resources, and bearing the working title MICATELL. This program's chances of success are dependent, however, on the French Air Force wanting this missile, the French Government contributing to the program costs, and those European countries presently using Sidewinder joining the project.

As France has hitherto maintained a reserved attitude toward MICATELL, a Sidewinder-based program is considered in Germany to have more chance of success.

There could in theory be yet another solution. A further possibility would be transatlantic cooperation using TELL, thus enabling NATO-wide standardization. Though recognition of the high level of German seeker head technology extends to American experts, and though recently the United States has again committed itself to reviving cooperation with Europe, it is most unlikely that the Americans would wish to make themselves dependent on foreign technology for a key component of the missile, in the form of the seeker head.

#### **Final Comments**

The airborne air defense sector has in the past been crucial to our national defense policy; it will remain so in the future, not least as part of NATO crisis response policy. Our national efforts will therefore need to focus on an effective fighter aircraft, with adequate guided missile armaments.

It is beyond dispute that the aging Sidewinder system for some years has not fully met requirements for sufficient armament for air combat over short distances. In the light of Russian developments of medium-range guided missiles, and consequent dangers in the event of any subsequent proliferation of these weapons, more and more experts are reaching the conclusion that the Western countries' present generation of guided missiles—namely, AMRAAM and MICA—will not meet future operational requirements. Germany would certainly be well advised, in its efforts to maintain a minimum industrial capacity for research, development, and production, to give priority to aircraft armaments, since an outstanding technological base already exists in this area. This would open up the opportunity to make good contributions to appropriate joint European programs. It is, therefore, more urgent than ever to make good decisions in the immediate future.

The danger that, in meeting our defense requirements—especially in aircraft armaments—we could place ourselves in total dependency on a monopolist, namely the United States, cannot be overlooked. The consequences would be high prices and program conditions stipulating the procurement of export versions of guided missiles, which experience shows to be generally less effective.

Europe does not have to wait for suitable generations of weapons to be released by the United States for export. The correct path would be to take the opportunity to initiate our own developments, by acting decisively and concentrating resources which to a substantial extent are already available; and—following the American example—rapidly progressing these developments. The problems of financing such work are bound to give rise to the question whether, in the light of the present external security situation, the procurement projects presently planned should be implemented to their full extent, or whether it would not be better to invest part of the money in safeguarding the German, and hence the European technological base. If, nevertheless—as has frequently occurred in the past—time should again be squandered on endless negotiations over harmonizing European national interests, then it will not be possible to catch up on the lead enjoyed by the American armaments industry for many years to come.

“Covenants without swords are but words”: These words of the English philosopher Thomas Hobbes should be

borne in mind by European countries, as they plan the armaments for their future fighters aircraft.

### TURKEY

#### Foreign Ministry—Iranian Nuclear Capability Not ‘Welcome’

TA0102153795 Ankara ANATOLIA in English  
1500 GMT 1 Feb 95

[FBIS Transcribed Text] Ankara, Feb 1 (A.A.)—Foreign Ministry spokesman Ferhat Ataman said that Turkey could not welcome countries in the region to have nuclear weapons threatening the neighbors.

Ataman, replying to questions on allegations that Iran could have nuclear weapons in near future, reminded that it was known that Iran was building a nuclear power plant. Yet, Ataman stressed, Turkey does not have information if Iran is going to use this plant for military purposes, he said.

Ataman said that Iranian officials repeatedly confirmed that the plant would be used for peaceful purposes.

**Nuclear, Nonaligned Nations Disagree Over NPT Extension**

*OW2401125195 Tokyo KYODO in English  
1204 GMT 24 Jan 95*

[FBIS Transcribed Text] New York, Jan. 24 KYODO—The world's nuclear powers clashed with nonaligned developing nations over a proposed permanent extension of the nuclear Nonproliferation Treaty (NPT) on the first day of a UN panel meeting on the subject that began Monday [23 January], panel sources said.

The issue of whether to extend the treaty indefinitely or for a limited period is a key topic at the meeting of the UN committee preparing for an April conference to set the terms of an extension as expiry of the treaty approaches.

The world's five nuclear powers—Britain, China, France, Russia and the United States—have been pressing for an unlimited extension of the treaty, which is expiring this year.

At Monday's meeting a French delegate appealed for an unlimited extension to keep the nuclear nonproliferation system intact, the sources said.

But a Mexican delegate, representing nonaligned nations, criticized the nuclear powers for having failed to promote nuclear disarmament as required under the treaty, in a remark signaling that nonaligned nations want to see nuclear disarmament come first, the sources said.

The nonaligned nations have demanded that an unlimited extension be allowed only on condition that another treaty is signed to ban nuclear tests.

But a Chinese delegate appealed to the nations taking part in the closed meeting to exclude nuclear tests for peaceful purposes, suggesting that the early signing of such a treaty may be difficult, the sources said.

The NPT requires the world's five nuclear powers not to export nuclear weapons and nuclear bomb-manufacturing technologies, while obliging other nations not to import them or accept related foreign assistance.

A total of 169 nations, including Japan, are signatories to the existing treaty, which came into force in 1970.



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